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ABSTRACT

Thirty hearing and 181 deaf young adults, whose vocationally relevant traits and prevocational behaviors were the focus of 1969 and 1970 studies, were interviewed in a followup study to determine current vocational status as well as early and current determinants of vocational adjustment. Some of the results indicated that the deaf young adults were employed in semi-skilled and unskilled occupations; that although the deaf received the same initial salaries as hearing young adults from the same socioeconomic backgrounds and age range, the hearing adults received significantly higher salary increases; and that turnover rates were similar to rates reported in other studies of deaf employment. Of nine criterion measures of vocational behavior which were subjected to multiple regression analysis, the following four were found capable of being predicted with reasonable success: number of months before the first job, judges' ratings of client's job satisfaction, percent of time employed, and percent of salary increase. The first measure was an index of job seeking behavior, the second an index of job satisfaction, and the remaining two were measures of satisfactory job performance. Of the measures, 61 percent were classified as early (obtained in the earlier studies). The findings had implications for formulating a more precise model of vocational behavior than models available, and applying the model to adolescents in school for appropriate prevocational training. (MC)

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The Evaluation of Vocational Development of Deaf Young Adults

(Final Report: RD-14-P-55065/2)

by

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FORWARD

Of the four authors, three have had considerable experince in the area of deafness. Drs. Lerman and Guilfoyle, in addition to being co-authors of a book on the pre-vocational behavior of deaf adolescents, have both written their doctoral dissertations in the area of deafness; Dr. Lerman on factors underlying vocational choice in deaf adolescents, and Dr. Guilfoyle on the process of speech reading in deaf children. Ms. Katz-Hansen is currently working on a dissertation on the organization of memory in deaf children. The only author with no prior experience in this field is Dr. Schapiro. However, he has brought to the project extensive skills in developmental psychology and research methodology, particularly in computer technology.

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Finally, we wish to thank all of the young deaf and hearing adults seen in this study for graciously allowing members of our staff to come into their homes and interview them.

Introduction

Background Information

Ideally, the goal of vocational rehabilitation is to assist the client in making a successful vocational adjustment, i.e., in securing a job which he performs competently and from which he receives some measure of satisfaction. Vocational adjustment itself is only one stage of an essentially two-stage process of vocational development. The first, the pre-vocational stage, consists of all behaviors associated with the world of work, short of actually seeking or obtaining employment. The second, the vocational stage, is concerned with all job-seeking behaviors and with actual vocational adjustment (job satisfaction and job satisfactoriness). Furthermore, the kinds of pre-vocational and vocational behaviors exhibited by a person are the result of certain individual and social factors. The relationship between these factors and behaviors is outlined in Figure 1, on the following page.

In this scheme, true vocational behavior, including job-seeking and job adjustment, is determined by several internal and external factors. Internal factors governing the kinds of jobs the client will seek include the client's vocationally related traits, abilities and interests, the extent of his knowledge of the world of work, the amount of vocational planning he has engaged in, and the level of his vocational aspirations. External factors governing the client's behavior include both sources of information about jobs and work in general obtained from parents, teachers, peers, etc..., and several contingency factors, including age, current economic conditions and geographic locale.

Sections of this general process of vocational development, as it is experienced by the deaf, have been examined in earlier studies. In one study (Lerman, Guilfoyle, Greenstein & Katz, 1969), certain vocationally relevant traits, abilities and interests of deaf adolescents were isolated. In another study (Lerman & Guilfoyle, 1970), the pre-vocational behavior of deaf adolescents was examined in great detail, through the use of the Vocational Information and Planning Index, an intensive vocational questionnaire derived from the work of Super & Overstreet (1960) on the vocational maturity of (hearing) adolescent boys. The present study is basically a continuation of these earlier studies, its focus being primarily the current vocational behavior of a sub-sample of previously studied deaf young adults.

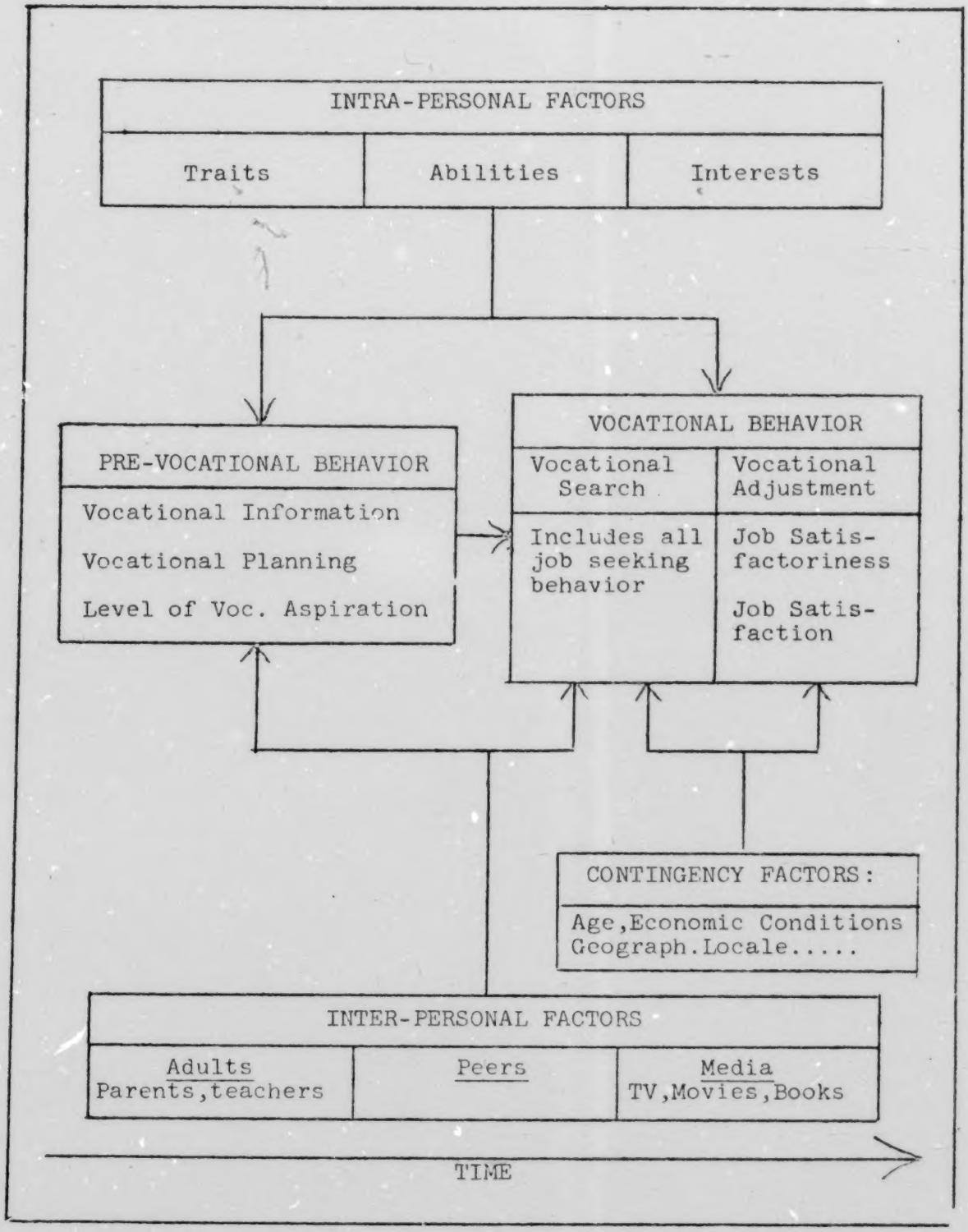

Fig. 1. An outline of the major components of vocational development.

Statement of the Problem

The present study has attempted to follow up a group of previously studied deaf young adults through the exploratory phase of vocational development, i.e., the period between leaving school and the final establishment in an occupation. Its objective is to analyze patterns of early work adjustment in order to identify the critical vocational problems facing the deaf young adult and to determine their causes. Specifically, the present study has attempted:

(1) to describe the current vocational status of the deaf young client, including his job-seeking behavior, post-school vocational training, use of rehabilitation services, and vocational adjustment (job satisfaction and job satisfactoriness);

(2) to determine the extent to which the deaf young adult's patterns of vocational adjustment are affected by early and current influences, including educational, pre-vocational, social and psychological factors.

Review of the Literature

There has not been a particularly large amount of research done on the vocational adjustment of the deaf. What studies are available have been confined to surveys of various sized samples of deaf workers. At the national level, Lunde & Bigman (1957) conducted the first large-scale survey of the occupational conditions of the deaf since the Martens (1935) survey. They obtained responses from over 10,000 deaf adults. Regional surveys were conducted by Boatner, Stuckless & Moores (1964) in New England, and Kronenberg & Blake (1966) in the Southwest, while Dunn (1957) conducted a survey of deaf workers residing in the state of Wisconsin. However, the bulk of the surveys have been follow-ups of former graduates of individual schools for the deaf: Central Institute (Hirsch, 1952), Kansas School (Mog, 1954), California School at Berkley (Jacobs & Gunderson, 1957), Clarke School (Bruce, 1960), New York City Public School 47 (Justman & Moskowitz, 1963) and the Lexington School (Rosenstein & Lerman, 1963. The major findings reported in all of these surveys have been grouped into six aspects of the vocational adjustment of the deaf, and each is treated separately.

Occupational Distribution of Deaf Workers

Tables 1 and 2 list the occupational distribution of male and female workers. Referring to Table 1, the percentages of males working in skilled and semi-skilled occupations is fairly high in all four of the surveys listed: 74.8, 53.1, 60.6 and 69.8. The higher percentages of unskilled workers in the Boatner, Stuckless & Moores (1964) and Kronenberg & Blake (1966) studies can be attributed, in part, to the fact that both of

these studies surveyed deaf young adults, only recently out of school. Probably, with time, some of these workers would move up into skilled and semi-skilled jobs with additional training. One surprising finding is the relatively higher percentage of males working in commercial and sales occupations reported by Justman & Moskowitz (1963). One possible explanation is that the sample is made up of deaf male residents of New York City, where many more commercial positions were available to them than were available to deaf males in any of the other studies.

Regarding the occupational distribution of female deaf workers, Table 2 shows a gradual decline in the percentage of professional female workers from 1957 to 1966. Commercial and sales positions, however, appear to account for roughly a third of occupations in most studies, with semi-skilled and unskilled positions accounting for the bulk of the remaining occupations.

Table 1

Occupational Distribution of Deaf Male Workers Reported in Six Surveys

OCCUPATIONS	SURVEY			
	Lunde & Bigman (1959)	Justman & Moskowitz (1963)	Boatner, Stuckless & Moores (1964)	Kronenberg & Blake (1966)
(Sample Size)	(5977)	(362)	(66)	(192)
Professional or Managerial	10.0%	13.3%	0.0%	1.0%
Commercial or Sales	3.7	14.4	1.5	2.6
Skilled (Craftsmen)	45.0	35.4	24.2	35.9
Semi-skilled (Operatives)	29.8	17.7	36.4	33.9
Unskilled	8.9	6.6	34.8	26.6
Other	2.6	13.5[a]	3.0	0.0
TOTAL	100.0	100.0	100.0	100.0

[a]No occupation reported.

Table 2

Occupational Distribution of Deaf Female Workers Reported in Six Surveys

OCCUPATIONS	SURVEY					
	Jacobs & Gunderson (1957)	Lunde & Bigman (1959)	Justman & Moskowitz (1963)	Rosenstein & Lerman (1963)	Boatner, Stuckless & Moores (1964)	Kronenberg & Blake (1966)
(Sample Size)	(43)	(1916)	(284)	(163)	(35)	(77)
Professional or Managerial	11.6%	9.2%	4.2%	2.5%	0.0%	1.3%
Commercial or Sales	30.2	18.0	35.2	26.4	42.9	37.7
Skilled (Craftsmen)	0.0	7.9	0.7	5.5	2.8	15.6
Semi-skilled (Operatives)	7.0	51.7	23.9	40.4	28.6	24.7
Unskilled	4.7	8.6	1.8	25.2	25.7	20.7
Other	46.5[a]	4.6	34.2[b]	0.0	0.0	0.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

[a]Homemakers.
[b]No occupation reported.

Level of Earnings

Dunn (1957) reported a median weekly wage of $65.00 (or $3380 per year) for a sample of 866 deaf living in the state of Wisconsin. This was in contrast with an average weekly wage of $85.22 (or $4431 per year) for all workers in the state's manufacturing industries in 1956. Lunde & Bigman (1959) found a similar median yearly income of $3465 for a much larger sample (approximately 10,000) of deaf respondents. They noted that this figure was considerably higher than the national figure of $2818. Nevertheless, they made the following qualifications: (1) "If incomes at each occupational level are compared, it is seen that deaf men earned less than hearing men, and deaf women earned less than deaf men, but about as much as hearing women. The wages of the Negro deaf were consistently lower than those of the whites" (p. 7); (2) "The survey group probably represents the financially average and better-off among the adult employed deaf population. It seems likely that the following kinds of people may have been under-represented: people under 20 and over 60, women, Negroes...and those of little education and low incomes" (p. 7).

Kronenberg & Blake (1966) found basically the same pattern as that noted by Lunde & Bigman (1959), in comparing the median yearly incomes of a sample of 250 deaf young adults living in the Southwest with incomes reported nationally for young hearing adults. The one notable exception was that deaf females in the 25-31-year bracket earned considerably more ($3120) than hearing women in the same age range ($2036). However, comparisons with earnings in the general population provide, at most, only rough indices of the general economic standing of the deaf worker. In some cases, the comparisons, as Lunde & Bigman (1959) have suggested, are misleading if not examined carefully. By contrast with the Kronenberg & Blake (1966) study, Boatner, Stuckless & Moores (1964) obtained a more meaningful comparison group for their sample of 101 deaf young adults in the New England area, by asking the parents of these deaf respondents to indicate the gross weekly earnings of other employed hearing siblings up to 28 years of age. The mean yearly wages of 24 male and female siblings was found to be approximately $4600 and $3700, respectively, in contrast to $3580 for deaf males and $2770 for deaf females.

Stability of Employment

Lunde & Bigman (1959) found that out of 8927 respondents holding any job in the preceding ten years, 67.8% reported holding only one job, 21.5% two jobs, and 10.7% three or more jobs. Boatner, Stuckless & Moores (1964) report a higher turnover rate: only 50.5% of their sample (n = 101) were still working on their first job, while 20.8% reported working

on their second job and 28.7% on their third or more job. Kronenberg & Blake (1966) found basically the same distribution: 51.5%, 26.7% and 22.2%. These last two findings are all the more significant when one considers that both are made up of deaf young adults, as opposed to the Lunde & Bigman (1959) sample, which included deaf workers of all age groups. One would have expected that the older workers (in the Lunde & Bigman sample), having been in the job market longer, would have been more likely to change jobs than those workers only just recently in the job market. This apparently is not the case. Perhaps younger deaf workers are becoming more dissatisfied with currently available jobs.

Job Satisfaction

Out of six studies reporting general job satisfaction ratings from their respondents, two studies (Rosenstein & Lerman, 1963; Boatner, Stuckless & Moores, 1964) found that approximately 45% of their respondents expressed satisfaction with their jobs; three studies (Mog, 1952; Justman & Moskowitz, 1963; Kronenberg & Blake, 1966) found percentages in the sixties expressing job satisfaction: 63.8%, 60.2%, and 63.6% respectively; while one study (Dunn, 1957) found that 90.5% of the respondents expressed satisfaction. In the case of the Boatner, Stuckless & Moores (1964) study, at least, the primary determinant was found to be salary. This appears to be true also of Lunde & Bigman's (1959) respondents. Approximately 70% of the men and 60% of the women rated their salaries as "good." Eighty-five percent of these same respondents also rated their working conditions as "good." However, when asked about the opportunity for promotion, only 30% of the men and 20% of the women gave a "good" rating.

Relation of Training to Present Occupation

Only three of the several studies already cited examined the relation of training received in schools for the deaf and current occupation. Mog (1952) found that 48% of the men (n = 91) and 28% of the women (n = 71) reported not working in a field in which they had been trained. These results, however, are at variance with those of Lunde & Bigman (1959) and Dunn (1957). Lunde & Bigman (1959) asked respondents "to indicate three trades studied in school, and then how long they had practiced each. In general, most of those studying a trade said that they had never followed it. Among the men, the proportion <u>never</u> pursuing a trade taught them was over 60% for the first kind of work named and 75% for the second and third. Among the women, the corresponding percentages were over 80% in each case" (p. 9). Dunn (1957) also found a large disparity between training and current occupation. Over 61% of a sample of 866 deaf living in Wisconsin reported working at a job <u>not</u>

related to previous training. He also found a relationship between utilization of training and salary. Of those respondents earning over $70.00 per week (as compared to the median weekly wage of $65.00 for the entire sample), 51% indicated working at a trade in which they had been trained.

Communication Used at Work

The methods of communication available to the deaf in dealing with the hearing are: speech and speechreading (or lipreading), writing, finger-spelling, signing, gesturing, and using pantomime. Lunde & Bigman (1959) found that more of these methods "were reported in use by those in professional and technical positions, and fewer going down the occupational scale. Professionals used speech more than any other method, and more than any other occupational group. But one kind of professional worker--teachers--used signing and fingerspelling even more than writing. Lipreading was also used by over half of professional workers. and writing by a similar proportion of professionals (except teachers). All other groups relied on writing--for example, over 70% of craftsmen and operatives. Signing was used least by clerical and sales workers, and most by service workers and laborers" (p. 8).

Kronenberg & Blake (1966) found that 52% of their respondents stated that they were able to communicate with their immediate supervisors primarily through verbal means (i.e., through speech, writing, finger-spelling, or some combination of these), 16% communicated primarily through non-verbal means (i.e., by signing, gesturing and using pantomime), and 32% used both verbal and non-verbal means. Furthermore, females appeared to be more verbal than males; 69% of females but only 45% of males stated that they communicated primarily through verbal means.

Rosenstein & Lerman (1963) found that in communication with hearing employers and supervisors, 40% of a sample of deaf female workers (n = 163) used speech only, 37% used speech most of the time and writing some of the time, and 23% used writing as the primary means of communication.

Justman & Moskowitz (1963) found that of the 575 deaf reporting some work experience, only 9% indicated that they were called upon to use "almost no speech" in their present or last job. At the other extreme, 20% stated that they were called upon to talk "almost all of the time."

Setting

The development and dissemination of the interview materials, including all forms and manuals, and the training of the interviewers, was carried out at the Research Department of the Lexington School for the Deaf, which consists of a library and seminar room and a series of offices. The key-punching and analysis of data was carried out at the UHMC Computer Center of New York University. The interviews themselves were conducted in the homes of the clients.

Methodology

Population and Sample

Description of the Population

All deaf clients interviewed were drawn from the population of "normally functioning deaf young adults" currently living in the northeastern section of the United States. All clients were former students of four schools for the deaf, all located within 150 miles of New York City: The Marie Katzenbach School (West Trenton, New Jersey), The New York School (White Plains, New York), The American School (West Hartford, Connecticut), and The Lexington School (New York City).

The schools were chosen to provide a reasonably accurate reflection of the heterogeneity of residential schools for the deaf on the northeastern seaboard, in size and type of staff, facilities and curriculum, and manner of selection and intake procedures. For example, three of the schools selected are private, while one is a state school. Two have highly developed vocational curricula, while the others have relatively small vocational facilities. Furthermore, except for the state school which cannot place restrictions on the student enrollment, the private schools have somewhat differing standards for acceptance. The proportion of resident populations also varies from school to school.

Normally functioning deaf young adults are those who met the following criteria, when seen in earlier studies: (1) presented no diagnosed organic impairment, such as epilepsy, cerebral palsy, etc....; (2) obtained an IQ score of 80 or above on the Revised Beta Examination; (3) presented no diagnosed psychosis; (4) had at least an 80 decibel loss (ISO) for the speech range in the better ear; (5) were deafened before two years of age; (6) presented a history of exclusive attendance in special schools or classes for the deaf.

Description of the Sample

All former students seen in Project RD-1380 (Lerman & Guilfoyle, 1970) as well as 67 former students from Project RD-2453-S (Lerman, et al., 1969) who fulfilled the same criteria for inclusion as those in the former project, were initially considered for interviewing. The status of these 492 clients is shown in Table 3. The number of deaf and hearing clients actually interviewed was 181 and 30 respectively. The 55 deaf young and 25 hearing young adults who were in school during the period covered by the project were sent brief questionnaires. Twenty-seven deaf and eight hearing students completed and returned these questionnaires.

Table 3

Status of 407 Deaf and 85 Hearing Clients Initially Considered for Interviewing

CATEGORY	CLIENTS			
	RD-1380 Deaf	RD-2453-S Deaf	Total Deaf	RD-1380 Hearing
NOT INTERVIEWED				
Still in H.S.	5	0	5	0
In Post H.S. Tng.	48	7	55	25
Too far to reach	19	2	21	2
Scheduling probs.	18	3	21	7
Unable to locate	32	0	32	9
No response	18	1	19	1
Refused	23	1	24	5
Dropped[a]	11	34	45	3
Deceased	4	0	4	0
In Service	0	0	0	3
Total	178	48	226	55
INTERVIEWED	162	19	181	30
TOTAL	340	67	407	85

[a]Incomplete interviews, transfers to hearing High Schools, emotional problems, etc.

Tables 4 through 10 summarize some of the more important demographic features of the (non-student) deaf and hearing samples. Forty-three percent of the deaf sample attended the Marie Katzenbach School for the Deaf (Table 4). The bulk (92.7%) of this sample is white (Table 5). Approximately 45% of the deaf characterized themselves as Catholics (Table 6), while roughly 30% express no religious preference. Thirty-two percent of the deaf sample are presently married (Table 7), as opposed to 43% of their hearing sibs. Most of the parents of these young adults are hearing: 93% of the mothers and 94% of the fathers (Table 8). Furthermore, the parents have completed an average of approximately nine years of schooling (Table 7). Finally, the average age of all clients at the time of their interviews was between 22 and 23 years of age (Table 10).

Table 4

School for the Deaf Attended by Male and Female Deaf Clients

SCHOOL FOR THE DEAF	FORMER STUDENTS			
	Male	Female	Total	Percent
M. Katzenbach	32	46	78	43.1
New York	32	09	41	22.7
American	20	09	29	16.0
Lexington	04	29	33	18.2
TOTAL	88	93	181	100.0

Table 5

Distribution of Clients by Hearing Status, Sex and Race

SEX	RACE					
	Black		White		Total	
	N	%	N	%	N	%
Hearing Sample						
Male	2	13.0	13	87.0	15	100.0
Female	1	6.7	14	93.3	15	100.0
TOTAL	3	10.0	27	90.0	30	100.0
Deaf Sample						
Male	3	3.5	83	96.5	86[a]	100.0
Female	10	10.8	83	89.2	93	100.0
TOTAL	13	7.3	166	92.7	179	100.0

[a]Excluding one male oriental client, and one client with missing data.

Table 6

Distribution of Clients by Hearing Status, Sex and Religious Affiliation

SEX	Religious Affiliation											
	Protestant		Catholic		Jewish		Other		None		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Hearing Sample												
Male	1	6.7	9	60.0	0	0.0	0	0.0	5	33.3	15	100.0
Female	2	13.3	8	53.4	0	0.0	2	13.3	3	20.0	15	100.0
TOTAL	3	10.0	17	56.7	0	0.0	2	6.7	8	26.6	30	100.0
Deaf Sample												
Male	9	10.2	41	46.6	7	8.0	4	4.5	27	30.7	88	100.0
Female	17	18.3	40	43.0	8	8.6	1	1.1	27	29.0	93	100.0
TOTAL	26	14.4	81	44.7	15	8.3	5	2.8	54	29.8	181	100.0

Table 7

Distribution of Clients by Hearing Status, Sex and Marital Status

SEX	MARITAL STATUS							
	Never Married		Now Married		Divorced-Separated		Total	
	N	%	N	%	N	%	N	%
Hearing Sample								
Male	8	53.3	6	40.0	1	6.7	15	100.0
Female	7	46.7	7	46.7	1	6.6	15	100.0
TOTAL	15	50.0	13	43.3	2	6.7	30	100.0
Deaf Sample								
Male	71	80.7	16	18.2	1	1.1	88	100.0
Female	51	54.8	42	45.2	0	0.0	93	100.0
TOTAL	122	67.4	58	32.0	1	0.6	181	100.0

Table 8

Parental Hearing Status of Male and Female Deaf Clients

INDEX	PARENTAL HEARING STATUS					
	MOTHLR			FATHER		
	Hear.	Deaf	Total	Hear.	Deaf	Total
MALE DEAF CLIENTS						
Number	81	7	88	82	16	88
Percent	92.0	8.0	100.0	93.2	6.8	100.0
FEMALE DEAF CLIENTS						
Number	88	5	93	88	5	93
Percent	94.6	5.4	100.0	94.6	5.4	100.0
ALL DEAF CLIENTS						
Number	169	12	181	170	11	181
Percent	93.4	6.6	100.0	94.0	6.0	100.0

Table 9

Average Parental Educational Level
of Male and Female Deaf Clients

	PARENTAL ED. LEVEL	
	Mother	Father
Male Deaf Clients (n=88)		
Mean	9.88	9.53
Standard Deviation	4.89	5.48
Female Deaf Clients (n=93)		
Mean	9.45	9.12
Standard Deviation	4.94	5.60

Table 10

Average Age of Hearing and Deaf Clients
at Time of Interview

INDEX	HEARING STATUS	
	Hearing	Deaf
Male Clients		
Number	15	88
Mean	22.95	23.17
Standard Deviation	1.61	1.92
Female Clients		
Number	15	93
Mean	22.13	22.69
Standard Deviation	1.25	1.93

Variables

Descriptive Function

The present study has basically two functions, one descriptive, the other analytic. Insofar as the descriptive function is concerned (i.e., to describe the current vocational status of the normally functioning young deaf adult living in the Northeast), a delineation of the young deaf adult's vocational status subsumes the following classes of characteristics: pre-employment, general employment, most recent employment and social.

Pre-employment characteristics. Included here is the type of post-school training taken (if any), and certain aspects of job-seeking behavior: number of months before the first job, number of different jobs sought, sources of jobs (i.e., family, friends, newspapers, state, federal or private employment agencies, school, SRS, general welfare agencies, and "the grapevine"), and sources of information about jobs (SRS, state or private employment agencies, personnel offices, unions, and organizations for the deaf and/or hard-of-hearing).

General employment characteristics. Included here are four measures related to length and amount of employment: time in the employment market, number of different jobs held, time employed, and percent time employed.

Most recent employment characteristics. Included here is a series of measures of each client's most recent employment: Socio-economic level of the client's job (Hamburger, 1958), type of training required (none, high school, on-the-job, special), achievement of promotion (yes or no), starting and current salaries, perceived attitudes of supervisors and co-workers towards the client (positive, neutral, negative), favorable aspects of the job (salary, advancement, working conditions, work itself, interpersonal relations, personal), unfavorable aspects of the job (salary, advancement,...), problems on the job (salary, advancement,...), current employment status (employed or unemployed), manner of job termination (quit, fired, laid-off), reasons for job termination (salary, advancement,...), important aspects of the job as perceived by the client (hours, neighborhood, easy work, clean work, benefits, raises, wages, security, "good" co-workers, "good" supervisor, interesting work, employer satisfaction), and the impact of the training received at the school for the deaf upon the client's current job (helpful or unhelpful).

Social characteristics. Included here are four measures of social relationships: membership in clubs, number of friends, number of confidants, and percent of confidants who are relatives.

Analytic Function

Regarding the analytic function of the project (i.e., to determine the early and current influences upon the young deaf adult's vocational adjustment), ten criterion (dependent) variables were initially selected to measure certain aspects of current vocational adjustment.

Job-seeking behavior. One aspect of the client's job-seeking activity is the amount of time (in months) it took to obtain his first employment.

Job satisfaction. Two measures of current job satisfaction were employed. The first was a composite of the independent ratings of the client's job satisfaction by two judges. The criteria used in making a judgment of "satisfied" or "unsatisfied" included the client's statements of the things he liked and did not like about his job, the kinds of problems he experienced on the job, his perception of the attitudes of his supervisor and co-workers towards him, the frequency of lateness, and, if employment was terminated, how it was terminated and the reasons for termination.

The second measure of job satisfaction was the sum of each client's ratings (on a 10-point scale, from "best" to "worst") of each of the following 13 aspects of his most recent job: general job satisfaction, hours, neighborhood, easy work, clean work, benefits, raises, wages, security, co-workers, supervisors, interesting work, and employer satisfaction.

Job satisfactoriness. Satisfactory performance on the job was assumed to be related to (1) occurrence or non-occurrence of promotion, and (2) percent salary increase.

Job mobility. Job mobility was included as a separate variable since moving from one job to the next may be a function of either unsatisfactory performance, or of low satisfaction, or both. Four measures were initially considered: (1) number of jobs held, (2) number of months in the employment market, (3) percent time employed, and (4) average job tenure (in months).

Life satisfaction. In addition to the preceding vocational variables, a measure of life satisfaction was obtained. As with job satisfaction each client was asked to rate each of the following 12 aspects of his current life situation on a ten-point scale: life in general, the future, friends, neighborhood,

education, family, communication skill, agreeableness, assertiveness, conscientiousness, competence, and marriage.

In order to determine whether or not the life and job satisfaction scales were essentially uni-dimensional, correlations among the life and job satisfaction scales were factored (principal axis, varimax rotation) to yield a four-factor solution, shown in Table 11. Scales with factor loadings greater than plus or minus .30 were used to identify the factors. Of the 13 job satisfaction (JS) scales, 10 have loadings greater than .30 on the first factor, and none on the second factor. Of the 12 life satisfaction (LS) scales, 8 load on the second factor and only one (future) on the first. The remaining scales are loaded on the third and fourth factors. Thus, for all practical purposes we can consider the JS and LS scales to be uni-dimensional. Under the circumstances the simplest estimate of each client's overall job and life satisfaction is the unweighted sum of each set of ratings.

The ten criterion variables were also intercorrelated. The resulting matrix is shown in Table 12. The bulk of the correlations are low, suggesting a fair degree of independence. One notable exception is (3) Time Employed, which has correlations of .67 and .64 with (4) Percent Time Employed, and (5) Average Job Tenure, respectively. Since the total time employed figures in the calculations of percent time employed and average job tenure, it was decided to eliminate Time Employed as a separate criterion variable.

In order to discover any early or current influences upon the young deaf client's vocational adjustment, as reflected in the nine criterion variables just described, 44 predictor (independent) variables were selected from the data of the present study and from that obtained in an earlier study: RD-1380 (Lerman & Guilfoyle, 1970). In selecting variables it was assumed, as indicated earlier, that a client's current vocational adjustment is determined, in part, by a number of internal and external factors, which have been operative only recently (current influences) or which have been operative for an extended period of time (early influences). This produces four classes of variables, which are listed in Tables 13 and 14: early and current internal factors, and early and current external factors. Current internal factors (Table 14) include physical factors and vocationally related traits, abilities, skills, knowledge and interests. Current internal factors (Table 13) are limited, in this study, to certain aspects of the client's social functioning: sociability and intimateness. Early external factors include several variables associated with the family: siblings, parental education, and cultural stimulation in the home. Current external factors are here confined to various aspects of the

Table 11

Loadings of Four Factors on Twenty-Five Life and Job Satisfaction Scales (n=181)

SCALE	FACTORS				
	1	2	3	4	h^2
JOB SATISFACTION					
Jobs (in general)	67	19	05	11	50
Hours	49	01	19	-10	28
Neighborhood	05	26	48	07	30
Easy Work	09	02	03	21	05
Clean Work	42	01	04	20	22
Benefits	59	07	06	10	35
Raises	70	09	00	17	52
Wages	72	17	01	03	55
Security	40	10	20	-02	21
Co-workers	31	27	38	-04	31
Supervisor	46	13	17	-43	44
Interesting Work	60	14	12	15	42
Employer Satis.	53	14	13	-34	43
LIFE SATISFACTION					
Life (in general)	27	21	37	35	38
Future	30	20	40	29	37
Friends	13	55	01	06	32
Neighborhood	09	34	09	-02	14
Education	17	40	14	08	22
Family	19	29	30	23	26
Communication Skill	04	62	-06	13	40
Agreeableness	14	44	26	12	30
Assertiveness	-05	61	28	-22	50
Conscientiousness	14	54	05	-24	37
Competence	04	61	12	06	39
Marriage	07	00	80	-10	65
% Total Variance	14	11	7	3	35
% Communality	41	30	19	10	100

Note. Varimax rotation. Decimals omitted. Marriage scale for married clients only.

Table 12

Intercorrelations Among Ten Criterion Variables of Vocational Adjustment (n=181)

	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1) Time to First Job	-03[a]	-23	-45	-18	-02	-09	11	-10	06
(2) Number of Jobs		24	-06	-44	-01	04	-03	-26	-19
(3) Time Employed			67	64	-22	-26	19	14	00
(4) % Time Employed				59	-17	-15	09	28	04
(5) Average Job Tenure					-19	-22	25	32	21
(6) Job Satisfaction						45	-08	-07	-24
(7) Life Satisfaction							-15	-18	-18
(8) Promotion								10	10
(9) % Salary Increase									26
(10) Judge's Ratings of Client's Job. Satis.									

[a] Decimals omitted.

client's most recent educational history: graduation status, school program, perceived impact of schooling on client's most recent job, and post-school training.

Most of the variables and associated measures shown in Tables 13 and 14 require no further explanation. Those that do are described in greater detail below.

Adolescent Independence Scale. This scale attempts to assess "independence of action as shown by the ability to make plans and carry out activities without close parental supervision or control" (Super & Overstreet, 1960, p. 96). The items comprising this scale include: (1) Age at which first overnight trip without close parental supervision was taken; (2) Age at which a bank account was opened in the subject's name; (3) The manner in which the subject obtained money for his day-to-day expenses; (4) Number of clubs in which the subject held an official position; (5) Whether the subject worked during the summer; (6) What the subject's reasons were for past, current and future work; (7) What percentage of free time the subject spent outside of the home.

Communication Skills Scale. A five-point rating scale developed in project RD-601 (Rosenstein & Lerman, 1963), which ranged from a rating of five ("very articulate, exceptionally good") to one ("very hard to comprehend; poor communication, limited skills").

Vocational Information and Planning Index. Measures the subject's knowledge of the world of work. Composed of 38 questions, including such things as knowledge of basic wages, tools required, benefits, how raises are obtained, etc....

California Picture Interest Inventory. Test yields scores for six fields of interest: interpersonal, natural, mechanical, business, esthetic and scientific, and for three supplementary scales: verbal, computational and time perspective. This last scale is a measure of the relative amount of time required to attain one's preferred occupations.

Consistency of Preference. In computing consistency scores, the subject's job preference (as expressed in Project RD-1380) was assigned to one of the six fields of the Picture Interest Inventory. A comparison was then made of the standard score obtained in this field with the highest standard score obtained in any field on the PII. If the field of preference score was the highest score, there was no discrepancy and the subject received a score of 100. Conversely, the subject whose field of preference score was his lowest interest score, received a score of 0. The formula used to derive the consistency score was:

Table 13

Early and Current, Internal and External Variables Possibly Associated with Current Vocational Adjustment of Young Deaf Adults

VARIABLE	INTERNAL	EXTERNAL
Early	See Table 14	Siblings: (a) Number of All Siblings (b) Number of Deaf Siblings (c) Number of Hearing Siblings Parental Educational Level: (a) Mother's (b) Father's Cultural Stimulation:[a] (a) Number of books in the home (b) Total types of books in the home (c) Total types of magazines in the home (d) Total equipment in the home
Current	Sociability: (a) Club membership (b) Prop. of deaf clubs (c) Number of Friends (d) Prop. of Cross-sex Friends (e) Prop. of Same-sex Friends (f) Prop. of Deaf Friends (g) Visits with Hearing Neighbors Intimateness: (a) Marital status (b) Number of confidants (c) Prop. confidants who are relatives	School for the Deaf Attended: (a) Graduation Status (Grad. vs Non-grad) (b) Program Followed (Acad. vs Vocational) (c) Impact of school on most recent job (Helpful vs. unhelpful) Post-School Training: (a) Training Status (Had tng. vs had not) (b) Length of training (in months)

[a]Measures obtained in Project RD-1380 (Lerman & Guilfoyle, 1970)

Table 14

Classes of Variables and Associated Measures of Possible Early Internal Influences Upon the Current Vocational Adjustment of Deaf Clients

CLASS	VARIABLE	MEASURE
Physical Factors	Sex	Male or Female
	Hearing Loss	Average hearing threshold in better ear, computed at 500, 1000 and 2000 Hertz (ISO)[a]
Traits	Adolescent Independence	Scores on Adolescent Independence Scale[a]
Skills	Communication	Scores on Communication Skills Rating Scale[a]
	Reading Achievement	Scores on the Stanford Achievement Test (Grade Equiv.)[a]
	Arithmetic Achievement	Scores on the Stanford Achievement Test (Grade Equiv.)[a]
Knowledge	Vocational Information and Planning	Total scores on the Vocational Information and Planning Index[a]
Interests	Specific Fields of Interest	Raw scores on the California Interest Inventory for the following fields: Interpersonal Service, Natural, Mechanical, Business, Esthetic, Scientific, Verbal, Computational, and Time Perspective[a]
	Reliability of Interest	Reliability of Interest Scale[a]
	Early Job Preference SES Level Consistency Validity	Revised Occupational Rating Scale[a] Judge's ratings[a] Judge's ratings[a]

[a]Measures obtained in Project RD-1380 (Lerman & Guilfoyle, 1970).

$$A = 100 - 100(Z_h - Z_c)/(Z_h - Z_l) \quad \text{where}$$

Z_h = Z score corresponding to the field most preferred;

Z_l = Z score corresponding to the field least preferred;

Z_c = Z score of that field subsuming the subject's preferred occupation, as obtained from the interview.

Reality of preference. During the interview, the examiner rated the "reality" of the subject's job preference in terms of his communication skills. This was defined as the fit between the subject's communication competence and that required by the job. Ratings of the latter were established by judges.

Commitment to preference. Determined by the subject's responses to questions of vocational preference. Ambiguity or doubt was rated "uncommitted," a single strong job preference was rated "committed."

Data Collection and Analysis

The collection of data from Project RD-1380 is described elsewhere (Lerman & Guilfoyle, 1970). Data from the present study was obtained from interviews with clients. An elaborate procedure for both locating and contacting clients was carried out.

Locating. Every attempt was made to locate and contact every client. In those cases where no current address was available, letters were sent out to clients already interviewed, church groups, and deaf clubs, asking them for residential information. Many clients were located as a result of this type of inquiry. In other cases, where certified letters to clients had been received but not answered, telephone contacts were made where feasible. Where clients could not be reached by telephone or TTY, interviewers were sent out "knocking on doors" trying to persuade clients to participate. Several interviews, which otherwise would have been lost, were obtained in this way.

Scheduling. Some of the clients in the study lived alone and had neither telephone nor TTY. For these people scheduling an interview involved at least one of the following procedures. First, a friend or relative was asked to set up an appointment for the client. If no friends or relatives were available, a letter was sent to the client giving him a number of appointment options. Confirmation of the appointment was done by mail or telegram. If these procedures failed, an interviewer was sent to the client's home to make the necessary arrangements.

Interviewers. Clients accepting an invitation to participate in the study were assigned to interviewers, previously selected and trained by the staff to conduct the interviews. Selection of the interviewers was made on the basis of the following criteria: competence in manual and oral communication, a background in work with deaf people, and personal and psychological competence. Eight interviewers met these criteria and were used in the project. The number of clients seen by each interviewer is shown in Table 15. Upon return of each completed interview, the interviewer was "de-briefed" by a staff member to insure that all problems arising from the interview were accounted for while the interviewer's memory of it was still fresh.

Interview forms. The interview forms themselves were made up of a manual consisting of 266 possible questions (256 of which were to be answered by the client) and a response form in which the interviewer recorded (in a telegraphic style) the client's responses. In the case of the manual for deaf clients (a sample page can be found in Appendix A). consulting experts in manual communication were used to put the questions in such a form that they could be directly signed to the client. This eliminated the need, on the part of the interviewer, to render his own "signing paraphrase" of the questions, and assured the designers that all clients were being asked the questions in approximately the same way.

Table 15

Number and Percent of Clients Seen by Eight Interviewers

CLIENTS	INTERVIEWERS								
	1	2	3	4	5	6	7	8	Total
Deaf	74	15	32	23	4	7	17	9	181
Hear.	14	7	0	0	4	0	2	3	30
TOTAL	88	22	32	23	8	7	19	12	211
PERCENT	42	10	15	11	4	3	9	6	100

Data from the response forms (a sample page is given in Appendix B) was then transferred to Initial Coding Sheets (see Appendix C) and then to key-punch coding sheets. The data were then punched onto IBM cards and transferred to the computer center for analysis. Data summaries of all variables were obtained. In addition, parts of the data were subjected to factor analysis (Principal Axis, Varimax Rotation) and to stepwise multiple regression analysis. The stepwise regression analyses were performed using the methods described in Efroymsen (1960). The data were analyzed on a Univac 1108 computer using the University of California Biomedical Computer Program entitled "Stepwise Multiple Regression BMD02R" (Dixon, 1971). Ideally this type of analysis should be based upon Pearson Product Moment correlations. However, some of the predictor variables and two of the criterion variables (Promotion Status and Judges' Ratings of Client's Job Satisfaction) were dichotomous. Accordingly, Point-biserial and Phi coefficients were calculated. These represent conservative estimates of the correlations that would have been obtained had the variables been measured continuously rather than dichotomously.

Results

Current Vocational Status of Young Deaf Adults

Pre-Employment Characteristics

In Table 16, it can be seen that 95% of all deaf clients graduated from their respective schools for the deaf. In addition, approximately 72% of these former students followed some type of vocational training (Table 17). Of the 181 former students, 55, or 30%, went on to obtain additional training. Table 18 gives a breakdown of the kinds of training received. Fifteen out of 28 males received training in printing or mechanical fields (e.g., watch repairing), while 21 out of 27 females received some kind of commercial training (e.g., key-punch operation). Table 18 also shows that in 20 of the 55 cases, SRS suggested this further training, and in 36 cases supplied tuition for clients.

In seeking employment, deaf males and females spent an average of 3.7 and 5.0 months, respectively, looking for their first jobs (Table 19), as opposed to 8.4 and 4.7 months for hearing males and females. (However, a 2x2 analysis of variance revealed no significant effects due to sex or hearing status, or their interaction.) During this time deaf clients looked for an average of 3.73 jobs; the average for hearing clients was found to be 3.76. For males, sources of leads about these jobs (Table 20) came from their former schools in 26 cases, from their families in 23 cases, and from friends in 19 cases. The remaining 20 males obtained information from a variety of other sources, including SRS. Similarly, 32 females relied on their former schools for leads; 26 relied on their families and 11 on their friends. The remaining 32 obtained information elsewhere.

General Employment Characteristics

Since leaving school, deaf males have been in the job market (Table 21) an average of 41.5 months and have been employed, on the average, 72% of that time. Furthermore, they have held an average of 2.3 jobs. Deaf females have been in the employment market an average of 38.9 months, have been employed an average of 68% of the time, and have held an average of 1.9 jobs. The values for their hearing sibs are approximately the same, and there are no significant differences attributable to either sex or hearing status.

Most Recent Employment Characteristics

Regarding the SES level of hearing and deaf client' most recent jobs, a 2x2 analysis of variance revealed a significant[1] effect due to hearing status ($F=20.80$; $df=1,205$) and a significant ($F=5.60$) interaction. Apparently deaf clients work in

[1]Significant at the .05 level of confidence.

Table 16

Graduation Status of Young Adult Deaf Clients

SEX	GRADUATION STATUS					
	Graduate		Non Grad.		Both	
	N	%	N	%	N	%
Male	83	94.3	5	5.7	88	100.0
Female	89	95.7	4	4.3	93	100.0
TOTAL	172	95.0	9	5.0	181	100.0

Table 17

Program Followed by Young Adult Deaf Clients in Former School for the Deaf

SEX	PROGRAM					
	Vocational		Academic		Both	
	N	%	N	%	N	%
Male	70	79.5	18	20.5	88	100.0
Female	61	65.6	32	34.4	93	100.0
TOTAL	131	72.4	50	27.6	181	100.0

Table 18

Type and Status of Post-School Training of Young Adult Male and Female Deaf Clients and Incidence of SRS Support

PROGRAM	SEX			STATUS			SENT BY SRS	SOURCE OF TUITION		
	Male	Female	Total	Full Time	Part Time	Total		SRS	Other	Total
Printing	7	0	7	6	1	7	2	5	2	7
Mechanical	8	0	8	7	1	8	4	6	2	8
Commercial	4	21	25	14	11	25	9	15	10	25
Liberal Arts	4	1	5	4	1	5	0	1	4	5
Data Processing	3	1	4	2	2	4	3	4	0	4
Commercial Art	2	2	4	4	0	4	2	4	0	4
Service	0	2	2	2	0	2	0	1	1	2
TOTAL	28	27	55	39	16	55	20	36	19	55
PERCENT	51	49	100	71	29	100	36[a]	66	34	100

[a]Referrals/Total or 20/55

Table 19

Number of Months Before First Job and Number of Jobs Sought During This Period

SEX	Months Before First Job		Number of Jobs Sought Before First Job								
	Mean	S.D.	1	2	3	4	5	6	7	8+	n
HEARING SAMPLE											
Male	8.40	16.75	0	1	4	2	0	0	1	0	8
Female	4.73	8.15	1	1	0	2	2	1	0	0	7
DEAF SAMPLE											
Male	3.74	5.80	8	8	7	1	6	2	1	9	42
Female	5.01	9.48	12	8	7	4	3	1	0	8	43

Table 20

Sources of Jobs for Male and Female Deaf Clients

SOURCE	JOB NUMBER											
	MALE						FEMALE					
	1	2	3	4	5	All	1	2	3	4	5	All
Family & Relatives	23	18	05	01	02	49	26	14	05	01	00	46
Friends	19	16	11	07	01	54	11	18	05	00	01	25
School	26	05	03	02	00	36	32	07	03	00	00	42
SRS	07	06	01	00	00	14	11	01	02	00	00	14
Unions, etc...	02	01	00	00	02	05	02	02	00	00	00	04
Grapevine	05	07	08	03	01	24	01	01	02	00	00	04
Newspapers	05	04	02	01	02	14	05	06	03	02	00	16
State Emp. Agencies	01	01	00	00	00	02	03	05	02	00	00	10
Private Emp. Agencies	00	00	00	01	00	01	00	02	03	02	03	10
TOTAL	88	58	30	15	08	199	91	46	25	05	04	171

Table 21

General Employment Characteristics of Samples of Young Adult Hearing and Deaf Clients

SEX	NUMBER OF MONTHS		PERCENT TIME EMPLOYED	NUMBER OF JOBS HELD
	In Job Market	On All Jobs		
HEARING SAMPLE				
MALE (n=15)				
Mean	48.85	36.21	67.33	2.60
S.D.	20.28	20.45	24.65	1.24
FEMALE (n=15)				
Mean	40.13	34.67	71.93	2.33
S.D.	18.71	16.68	24.84	0.90
DEAF SAMPLE				
MALE (n=88)				
Mean	41.49	34.03	71.56	2.27
S.D.	20.09	22.27	29.85	1.34
FEMALE (n=93)				
Mean	38.91	27.52	67.72	1.94
S.D.	19.04	16.82	28.10	1.26

jobs significantly lower on the socio-economic scale than do hearing clients, this discrepancy being primarily attributable to the much lower job levels associated with deaf males in comparison to those associated with hearing males: 4.35 vs 5.50. This is reflected somewhat in the kinds of training required for their jobs, shown in Table 23. Fifty-nine percent of deaf clients required no training and 27% required only on-the-job training, as opposed to 53% and 30% for hearing clients.

Despite the fact that deaf clients are working at socio-economically lower jobs, there is no significant difference in current salaries (Table 24) between deaf and hearing clients, although there is a significant sex-hearing status interaction; deaf males make significantly less ($F=13.68$; $df=1,205$) money per month than hearing males: $431 vs $549. However, hearing clients have obtained salary increases significantly higher than deaf clients ($F=8.26$; $df=1,206$). This may be related to the fact that 17% of the hearing sibs, but only 7% of the deaf clients (Table 25) received promotions in their most recent jobs. It is probably not related to supervisors' attitudes. Seventy-three percent of both hearing and deaf clients (22 out of 30 and 131 out of 179) perceived their supervisors' attitude towards them as neutral (Table 26).

Regarding the most important aspects of a job (Table 27), there was considerable unanimity among male and female deaf clients; 50% of the males and 42% of the females considered salary to be the most important aspect. Only two other aspects were considered by more than 10 male or female clients: interesting work and benefits; the percentages were 14% and 11% for males and 19% and 13% for females. Hearing males and females, on the other hand, differed not only between themselves but with deaf clients on what was most important. Thus, equal numbers of hearing males (33%) considered promotions and interesting work as most important, with salary considered important by only 20%, while 33% of hearing females considered interesting work to be the most important aspect, 26% good pay, 20% social atmosphere, and 20% good supervisors.

When the least important aspect of a job is considered, there is much more consensus among hearing and deaf clients. The three aspects rated least important by both hearing and deaf clients alike are: physical atmosphere, easy work and security. For deaf clients the percentages are: 31%, 15% and 14%. For the hearing, they are: 48%, 27% and 13%.

In addition to ratings of the most and least important aspects of a job, each client was asked what things he liked (satisfiers), did not like (dissatisfiers), and had problems with, on his most recent job. Tables 28 through 30 summarize the responses given. Regarding satisfiers (Table 28), deaf males and females showed a fairly similar pattern: 49% of males and 54% of females reported liking some aspect of the work itself

Table 22

Socio-Economic Status Rating of Most Recent Employment of Young Adult Hearing and Deaf Clients

SEX	SES RATING								
	1	2	3	4	5	6	7	Average	N
HEARING SAMPLE									
Male	1	0	2	3	5	4	0	4.35	15
Female	0	0	1	1	10	3	0	5.00	15
DEAF SAMPLE									
Male	0	0	0	3	41	41	3	5.50	88
Female	0	0	2	0	58	30	1	5.31	91

Table 23

Type of Training Required on the Most Recent Job of Young Adult Hearing and Deaf Clients

SEX	TRAINING REQUIRED							
	None		On-the-Job		Special		Total	
	N	%	N	%	N	%	N	%
HEARING SAMPLE								
Male	8	53	4	27	3	20	15	100
Female	8	53	5	33	2	14	15	100
TOTAL	16	53	9	30	5	17	30	100
DEAF SAMPLE								
Male	49	56	31	35	8	9	88	100
Female	55	62	17	19	17	19	89	100
TOTAL	104	59	48	27	25	14	177	100

Table 24

Average Starting and Current Salaries per Month and Percent Increase on Most Recent Job of Young Adult Hearing and Deaf Clients

SEX	AMOUNT OF SALARY		% SALARY INCREASE
	Starting	Current	
HEARING SAMPLE			
MALE			
Mean	405.13	549.13	68.13
S.D.	155.14	215.05	26.21
FEMALE			
Mean	292.53	365.87	63.07
S.D.	64.38	114.62	35.15
DEAF SAMPLE			
MALE			
Mean	357.59	431.22	40.54
S.D.	97.68	139.93	38.64
FEMALE			
Mean	322.34	379.60	47.35
S.D.	97.50	124.74	39.75

Table 25

Prevalence of Promotions on Most Recent Job for Young Adult Hearing and Deaf Clients

SEX	PROMOTIONS					
	NO		YES		TOTAL	
	N	%	N	%	N	%
HEARING SAMPLE						
Male	11	73	4	27	15	100
Female	14	93	1	7	15	100
TOTAL	25	83	5	17	30	100
DEAF SAMPLE						
Male	81	92	7	8	88	100
Female	83	93	6	7	89	100
TOTAL	164	93	13	7	177	100

Table 26

Perceived Attitudes of Supervisors and Co-workers Towards Young Adult Hearing and Deaf Clients

SEX	PERCEIVED ATTITUDE TOWARDS CLIENTS							
	Supervisor				Co-workers			
	Neg.	Neu.	Pos.	Tot.	Neg.	Neu.	Pos.	Tot.
HEARING SAMPLE								
Male	1	13	1	15	1	12	2	15
Female	2	9	4	15	0	13	2	15
TOTAL	3	22	5	30	1	25	4	30
DEAF SAMPLE								
Male	12	67	9	88	7	71	7	85
Female	12	64	15	91	15	65	9	89
TOTAL	24	131	24	179	22	136	16	174

Table 27

Aspects of Their Most Recent Jobs Rated Most and Least Important by Young Adult Hearing and Deaf Clients (n=211)

JOB ASPECT	MALES				FEMALES				BOTH			
	MOST IMPORTANT		LEAST IMPORTANT		MOST IMPORTANT		LEAST IMPORTANT		MOST IMPORTANT		LEAST IMPORTANT	
	N	%	N	%	N	%	N	%	N	%	N	%
DEAF SAMPLE												
Good Pay	44	50	2	2	39	42	3	3	83	46	5	3
Benefits	10	11	6	7	12	13	5	6	22	12	11	6
Security	6	7	11	13	1	1	15	16	7	4	26	14
Promotions	3	3	5	6	8	9	13	14	11	6	18	10
Interesting Work	12	14	3	3	18	19	3	3	30	17	6	3
Easy Work	2	2	12	14	0	0	15	16	2	1	27	15
Good Supervisor	4	4	10	11	5	6	1	1	9	5	11	6
Social Atmos.	2	2	3	3	4	4	7	8	6	3	10	6
Good Hours	3	3	2	2	2	2	9	10	5	3	11	6
Physical Atmos.	2	2	34	39	4	4	22	23	6	3	56	31
TOTAL	88	100	88	100	93	100	93	100	181	100	181	100
HEARING SAMPLE												
Good Pay	3	20	0	0	4	26	0	0	7	23	0	0
Benefits	1	7	0	0	0	0	1	7	1	3	1	3
Security	0	0	0	0	1	7	4	26	1	3	4	13
Promotion	5	33	0	0	0	0	1	7	5	18	1	3
Interesting Work	5	33	0	0	5	33	0	0	10	33	0	0
Easy Work	0	0	5	33	0	0	3	20	0	0	8	27
Good Supervisor	0	0	0	0	2	14	1	7	2	7	1	3
Social Atmos.	1	7	1	7	3	20	0	0	4	13	1	3
Good Hours	0	0	0	0	0	0	0	0	0	0	0	0
Physical Atmos.	0	0	9	60	0	0	5	33	0	0	14	48
TOTAL	15	100	15	100	15	100	15	100	30	100	30	100

Table 28

Aspects of Their Most Recent Job that Young Adult Hearing and Deaf Clients Stated They Liked

JOB ASPECT	HEARING				DEAF			
	Male		Female		Male		Female	
	N	%	N	%	N	%	N	%
Interpersonal	1	7	6	44	2	2	5	6
Work Itself	5	33	3	21	43	49	50	54
Advancement	4	26	0	0	2	2	3	3
Salary	3	20	1	7	9	10	2	2
Work Conditions	0	0	3	21	8	9	5	6
Uncodable	1	7	0	0	4	5	5	6
Nothing	1	7	1	7	20	23	21	23
TOTAL	15	100	15	100	88	100	91	100

Table 29

Aspects of Their Most Recent Job that Young Adult Hearing and Deaf Clients Stated They Did Not Like

JOB ASPECT	HEARING				DEAF			
	Male		Female		Male		Female	
	N	%	N	%	N	%	N	%
Interpersonal	1	7	2	14	9	10	11	12
Work Itself	2	13	5	36	26	30	25	28
Advancement	1	7	0	0	2	2	1	1
Salary	1	7	1	7	17	19	10	11
Work Conditions	5	33	2	14	7	8	10	11
Uncodable	2	13	1	7	3	3	4	5
Nothing	3	20	3	22	24	28	29	32
TOTAL	15	100	15	100	88	100	90	100

Table 30

Aspects of Their Most Recent Job With Which Young Adult Hearing and Deaf Clients Stated Having Problems

JOB ASPECT	HEARING				DEAF			
	Male		Female		Male		Female	
	N	%	N	%	N	%	N	%
Interpersonal	2	13	2	13	14	16	20	22
Work Itself	2	13	1	7	8	9	2	2
Advancement	0	0	1	7	1	1	0	0
Salary	0	0	0	0	4	5	1	1
Work Conditions	0	0	0	0	2	2	6	7
Uncodable	2	13	2	13	0	0	4	4
Nothing	9	61	9	60	59	67	58	64
TOTAL	15	100	15	100	88	100	91	100

Table 31

Reasons Given for Leaving Most Recent Job by Young Adult Hearing and Deaf Clients

JOB ASPECT	HEARING				DEAF			
	Male		Female		Male		Female	
	N	%	N	%	N	%	N	%
Job Related	5	42	3	30	30	51	18	30
Personal	4	33	5	50	8	14	27	46
Economic Conds.	0	0	0	0	9	15	3	5
Different Work	3	25	1	10	3	5	3	5
Uncodable or No Response	0	0	1	10	9	15	8	14
TOTAL	12	100	10	100	59	100	59	100

(e.g., "I like working with presses."), while 23% of both males and females reported liking nothing about their current jobs. However, while 33% of hearing males reported liking some aspect of the work itself, 26% reported liking the possibilities for advancement available to them, and 20% reported liking their current salaries. (Only 10% of deaf males mentioned salaries.) In the case of hearing females, the satisfiers most often mentioned had to do with interpersonal relationships (e.g., "friendly people," "nice supervisor").

The "work itself" category (Table 29) was also a significant source of dissatisfaction (e.g., "My job is boring.") among all but hearing males, who were more often dissatisfied with the actual conditions of work (33%). The percentages of clients reporting nothing which dissatisfied them varied from 20% of hearing males to 32% of deaf females. Finally, where problems arose (Table 30) they were, more often than not, of an interpersonal nature. In the case of the deaf clients, this often was the result of poor communication between themselves and their hearing bosses.

At the time of the interview, many clients had recently switched jobs. Whether their current job was considered their "most recent job" depended upon the length of employment. If they had been employed at their current job less than a month, their previous job was considered their most recent job. Table 32 gives a breakdown of the reasons for terminating the most recent job. Approximately 20% of hearing and deaf males and hearing females, and 34% of deaf females were still working at the most recent job. Termination, when it occurred, more often than not, took the form of quitting. Few clients were fired, and few of the hearing clients were laid off. Only with the deaf were lay-offs numerous; 21% of the males and 15% of the females reported this form of termination.

An analysis of the reasons for termination (Table 31) reveals some sex and hearing status differences. Sizable numbers of hearing (42%) and deaf (51%) males cited reasons relating to the job, while many hearing (50%) and deaf (46%) females cited personal reasons, chief among these being marriage and pregnancy. In addition, 25% of the hearing males, as opposed to only 5% of deaf males cited reasons having to do with switching to a different type of work.

Finally, in evaluating the impact of their former schooling (Table 33) upon their most recent job, 63.6% of deaf males and 70.7% of deaf females found it to have been helpful.

Table 32

Manner of Job Separation from Most Recent Job of Young Adult Hearing and Deaf Clients

CATEGORY	HEARING				DEAF			
	Male		Female		Male		Female	
	N	%	N	%	N	%	N	%
Still Working	3	20	3	20	28	32	31	34
Quit	12	80	10	66	35	40	44	49
Fired	0	0	1	7	6	7	2	2
Laid Off	0	0	1	7	18	21	13	15
TOTAL	15	100	15	100	87	100	90	100

Table 33

Perceived Impact of Deaf Education on Most Recent Job by Deaf Clients

SEX	IMPACT OF DEAF EDUCATION					
	Helpful		Unhelpful		Total	
	N	%	N	%	N	%
Male	56	63.6	32	36.4	88	100.0
Female	65	70.7	27	29.3	92	100.0
TOTAL	121	67.2	59	32.8	180	100.0

Social Characteristics

In asking clients to list their friends, only those whom the client had known for three or more months, and whose job titles were known by the client were recorded. This was done to assure the investigators that the client had had some social contact, over a reasonable time period, with the individuals so named. Table 34 lists mean number of friends of deaf and hearing clients by sex. Females, on the average, had more friends than did males ($F=7.18$; $df=1,207$) but there were no differences associated with hearing status. Table 35 lists the average percentages of same-sex friends (the percentages of cross-sex friends are complements of these values). There is a significant sex difference ($F=469.00$; $df=1,207$); hearing and deaf males have a very high percentage (approximately 90%) of same-sex friends.

Finally, regarding both the total number of confidants (Table 36) and percent of confidants who are relatives (Table 37), analysis of variance reveals neither significant main effects (sex and hearing status) nor significant interactions.

Determinants of Vocational Adjustment

In order to determine the most effective combination of early and current predictors of each of nine criterion measures of vocational adjustment, a stepwise multiple regression analysis was performed for each criterion measure. The results of these analyses are summarized in Table 38 which lists the coefficients of multiple correlation (R) associated with each criterion measure. R represents the correlation between the obtained criterion scores and the predicted values obtained from a weighted combination of predictors. Table 38 also lists the number of predictors associated with each R, and lists the coefficients of determination (R^2); i.e., the percent of variance in the criterion measure accounted for by the weighted combination of predictors.

In multiple regression analysis, the concern is with the predictability of one variable, the criterion, from a knowledge of several variables called predictors.

In the stepwise procedure used here, predictors are added to the regression equation one by one, in a sequential order, so that a variable added to the equation at any step is that one which accounts for the greatest amount of variance in the criterion. Before a variable is added, it must be determined that it actually adds something new to the already existing set of predictors. In this connection, the semi-partial correlation becomes important. The semi-partial correlation is the correlation between two variables when other variables are held constant. A variable considered for addition is one which, at any step, (a) has the highest semi-partial correlation with the criterion, and (b) produces a significant increase in

Table 34

Stated Number of Friends of Young Adults Hearing and Deaf Clients

SEX	HEARING STATUS	
	Hear	Deaf
MALE		
(n)	(15)	(88)
Mean	2.80	3.23
S.D.	1.66	1.45
FEMALE		
(n)	(15)	(93)
Mean	3.60	3.71
S.D.	1.35	1.40

Table 35

Percent Same-Sex Friends of Young Adult Hearing and Deaf Clients

SEX	HEARING STATUS	
	Hear	Deaf
MALE		
(n)	(15)	(88)
Mean	90.2	93.2
S.D.	26.4	15.5
FEMALE		
(n)	(15)	(93)
Mean	29.1	17.0
S.D.	39.7	28.5

Table 36

Stated Number of Confidants of Young Adult Hearing and Deaf Clients

SEX	HEARING STATUS	
	Hear	Deaf
MALE		
(n)	(15)	(88)
Mean	1.33	1.96
S.D.	0.82	1.29
FEMALE		
(n)	(15)	(93)
Mean	2.60	2.12
S.D.	1.40	1.33

Table 37

Percent Confidants Who Are Relatives by Young Adult Hearing and Deaf Clients

SEX	HEARING STATUS	
	Hear	Deaf
MALE		
(n)	(15)	(88)
Mean	61.0	63.8
S.D.	47.0	41.6
FEMALE		
(n)	(15)	(93)
Mean	62.9	74.7
S.D.	34.1	37.5

Table 38

Coefficients of Multiple Correlation and Determination for Nine Criterion Measures of Vocational Adjustment

CRITERION MEASURES	No. of Predictors	COEFFICIENTS	
		Multiple Correlation $\tilde{R}$	Multiple Determination $\tilde{R}^2$
JOB SEEKING			
Mos. Before 1st Job	12	753	567
JOB SATISFACTION			
Judges' Ratings	15	537	288
Clients' Ratings	8	474	224
JOB SATISFACTORINESS			
% Time Employed	15	595	354
% Salary Increase	14	520	270
Number of Jobs	4	371	138
Promotion Status	5	362	131
Mean Job Tenure	6	353	124
LIFE SATISFACTION			
Clients' Ratings	10	478	229

Note: All Rs corrected for shrinkage. Decimals omitted.

the ability to predict the criterion by its addition to the existing predictors. The square of the multiple correlation coefficient (R^2) is an indication of the amount of variance in the criterion which can be accounted for by the existing predictors. The variable in question is added to the equation providing the R^2 resulting from the addition of the new predictor is found to be significantly greater ($p < .05$) than the R^2 computed before the new predictor is added. In general, a variable is added to the prediction equation only when a significantly greater amount of variance in the criterion can be accounted for by the addition of the new variable.

Tables 39 through 47 list the "b" and "β" weights associated with the predictors of each of the nine criterion measures. With these weights it is possible to write multiple regression equations predicting the criterion measures, either in "raw score" form or in "standard score" form. For raw scores, the general equation is as follows:

(1) $\hat{Y} = a + \sum b_i X_i \quad (i = 1,2,3,...n)$, where

$\hat{Y}$ = the predicted criterion measure
a = the intercept constant
b_i = the "b" weight associated with predictor X_i
X_i = the value of the ith predictor measure

In the standard form of the general equation, "b" is replaced with "β", "X" is replaced with its standard score equivalent, "z," and "a" takes a value of zero, yielding the following equation:

(2) $z = \sum \beta_i z_i \quad (i = 1,2,3,...n)$

For example, the raw score equation predicting "number of jobs held" would be written as:

(3) $\hat{Y} = 2.403 + 0.023X_1 - 0.023X_2 - 0.508X_3 + 0.071X_4$, where

$\hat{Y}$ = predicted number of jobs
X_1 = General Clerical Test score
X_2 = Reading Achievement Test score
X_3 = Level of current job aspirations (1 or 2)
X_4 = Adolescent Independence Scale score

In reviewing Tables 39 through 47, it is apparent that a sizable percentage of the predictors (57%) were early determinants. It is also clear that many of the predictors figured in the regression equations of more than one criterion measure. In fact, 14 of the original 53 predictors appeared with three or more criteria. Of these, six could be regarded as current determinants and eight as early ones. The six current deter-

Table 39

(b) and (β) Weights Associated with Twelve Predictors of the Criterion Measure: Number of Months Before the First Job

PREDICTORS		WEIGHTS	
No.	Description	b	β
1	Length of Post-H.S. Training	0.813	0.674
2	High School Program	2.993	0.166
3	Total Equipment at Home (Early)[a]	-0.229	-0.133
4	High School Graduation Status	-5.305	-0.141
5	Voc. Aspiration Level (Early)[a]	-1.427	-0.186
6	Sex (Early)	2.539	0.153
7	Communication Skill (Early)[a]	-0.097	-0.133
8	Club Membership	-1.025	-0.145
9	Consistency of Voc. Interest (Early)[a]	0.003	0.126
10	Mother's Educational Level (Early)[a]	0.143	0.084
11	Clerical Ability (Early)[a]	-0.038	-0.102
12	Commitment to Job Preference (Early)[a]	-1.655	-0.082
a	Intercept	17.387	

Note: $\tilde{R}_{c-1,2,...12} = .753$; $SE_{est} = 5.533$

[a]Obtained from Project RD-1380 (Lerman & Guilfoyle, 1970).

Table 40

(b) and (β) Weights Associated with Fifteen Predictors of the Criterion Measure: Judges' Ratings of Client's Job Satisfaction

PREDICTORS		WEIGHTS	
No.	Description	b	β
1	SES Level of Current Job	-0.365	-0.248
2	Supervisor's Attitude	0.054	0.302
3	Hearing Loss (Early)[a]	0.012	0.153
4	High School Graduation Status	0.847	0.187
5	Esthetic Field Interest (Early)[a]	-0.011	-0.081
6	Sex (Early)	0.887	0.471
7	% Cross-Sex Friends	-0.008	-0.375
8	Current Job Aspirations	-0.281	-0.111
9	Voc. Information & Planning (Early)[a]	-0.008	-0.134
10	Clerical Ability (Early)[a]	0.012	0.284
11	Number of Deaf Siblings (Early)	0.273	0.182
12	Reality of Job Preference (Early)[a]	-0.506	-0.131
13	Business Field Interest (Early)[a]	-0.014	-0.158
14	Number of Co-workers on Current Job	0.036	0.125
15	Revised Beta Exam: Total Score(Early)[a]	-0.016	-0.159
a	Intercept	1.904	

Note: $\tilde{R}_{c-1,2,...15} = .537$; $SE_{est} = 0.796$

[a]Obtained from Project RD-1380 (Lerman & Guilfoyle, 1970)

Table 41

(b) and (β) Weights Associated with Eight Predictors of the Criterion Measure: Client's Ratings of Job Satisfaction

PREDICTORS		WEIGHTS	
No.	Description	b	β
1	Percent of Cross-Sex Friends	-0.106	0.292
2	Commitment to Job Preference (Early)[a]	-9.640	-0.248
3	SES Level of Current Job	3.981	0.159
4	% Confidants who are Relatives	-0.082	-0.202
5	Adolescent Independence (Early)[a]	-1.210	-0.185
6	Revised Beta Exam IQ (Early)[a]	-0.031	-0.106
7	School Impact on Current Job	-4.331	-0.134
8	Hearing Loss (Early)[a]	-0.175	0.132
a	Intercept	53.163	

Note: $\tilde{R}_{c-1,2,\ldots 8} = .474$; $SE_{est} = 14.136$

[a]Obtained from Project RD-1380 (Lerman & Guilfoyle, 1970)

Table 42

(b) and (β) Weights Associated with Fifteen Predictors of the Criterion Measure: Percent Time Employed

PREDICTORS		WEIGHTS	
No.	Description	b	β
1	Length of Post-H.S. Training	-1.238	-0.298
2	Voc. Information & Planning (Early)[a]	0.350	0.193
3	High School Program	-15.794	-0.253
4	Arithmetic Achievement (Early)[a]	0.685	0.454
5	Reading Achievement (Early)[a]	-0.768	-0.305
6	Revised Beta Exam IQ (Early)[a]	-0.090	-0.173
7	Post H.S. Training Status	-14.467	-0.248
8	Computational Field Interest (Early)[a]	1.140	0.192
9	School Impact on Current Job	6.359	0.110
10	Current Job Aspirations	-11.589	-0.151
11	Mechanical Field Interest (Early)[a]	0.337	0.106
12	Total Equipment in Home (Early)[a]	0.533	0.090
13	Commitment to Job Preference (Early)[a]	7.568	0.109
14	Marital Status	-6.494	-0.117
15	High School Graduation Status	13.713	0.106
a	Intercept	51.227	

Note: $\tilde{R}_{c\text{-}1,2,\ldots 15} = .595$; $SE_{est} = 23.009$

[a]Obtained from Project RD-1380 (Lerman & Guilfoyle, 1970)

Table 43

(b) and (β) Weights Associated with Fourteen Predictors of the Criterion Measure: Percent Increase in Salary

PREDICTORS		WEIGHTS	
No.	Description	b	β
1	Number of Friends	6.072	0.226
2	Reality of Job Preference (Early)[a]	-24.432	-0.154
3	Verbal Field Interest (Early)[a]	3.868	0.466
4	Hearing Loss (Early)[a]	0.734	0.228
5	Interpersonal Field Interest (Early)[a]	-1.416	-0.290
6	High School Graduation Status	28.118	0.160
7	Business Field Interest (Early)[a]	-0.867	-0.238
8	Number of Deaf Siblings (Early)	10.339	0.167
9	No. Types of Books at Home (Early)[a]	4.634	0.314
10	Total Equipment at Home (Early)[a]	-1.611	-0.200
11	School Impact on Current Job	-11.115	-0.142
12	Percent Cross-Sex Friends	0.131	0.149
13	Length of Post H.S. Training	-0.697	-0.124
14	Vocational Info. & Planning (Early)[a]	0.288	0.117
a	Intercept	-40.795	

Note: $\tilde{R}_{c\text{-}1,2,\ldots14} = .520$; $SE_{est} = 33.183$

[a]Obtained from Project RD-1380 (Lerman & Guilfoyle, 1970)

Table 44

(b) and (β) Weights Associated with Four Predictors of the Criterion Measure: Number of Jobs Held

PREDICTORS		WEIGHTS	
No.	Description	b	β
1	Clerical Ability (Early)[a]	0.023	0.371
2	Reading Achievement (Early)[a]	-0.023	-0.196
3	Current Job Aspirations	-0.508	-0.144
4	Adolescent Independence (Early)[a]	0.071	0.132
a	Intercept	2.403	

Note: $\tilde{R}_{c-1,2,3,4} = .371$; $SE_{est} = 1.221$

Table 45

(b) and (β) Weights Associated with Five Predictors of the Criterion Measure: Promotion Status

PREDICTORS		WEIGHTS	
No.	Description	b	β
1	Arithmetic Achievement (Early)[a]	0.003	0.197
2	Supervisor's Attitude	0.010	0.182
3	Marital Status	0.103	0.184
4	Overtime Work Status	0.075	0.130
5	Voc. Information & Planning (Early)[a]	0.003	0.163
a	Intercept	0.404	

Note: $\tilde{R}_{c-1,2,...5} = .362$; $SE_{est} = 0.270$

[a]Obtained from Project RD-1380 (Lerman & Guilfoyle, 1970)

Table 46

(b) and (β) Weights Associated with Six Predictors of the Criterion Measure: Mean Job Tenure

PREDICTORS		WEIGHTS	
No.	Description	b	β
1	Length of Post H.S. Training	-0.677	-0.289
2	Arithmetic Achievement (Early)[a]	0.193	0.227
3	High School Program	-7.511	-0.214
4	Computational Field Interest (Early)[a]	0.552	0.165
5	No. Visits/Mo. with Hearing Neighbors	-0.207	-0.122
6	Reality of Job Preference (Early)[a]	-7.839	-0.119
a	Intercept	31.513	

Note: $\tilde{R}_{c-1,2,\ldots 6} = .353$; $SE_{est} = 15.102$

Table 47

(b) and (β) Weights Associated with Ten Predictors of the Criterion Measure: Client's Life Satisfaction Ratings

PREDICTORS		WEIGHTS	
No.	Description	b	β
1	% Confidants who are Relatives	-0.070	-0.252
2	Mechanical-Spatial Ability (Early)[a]	-0.010	0.118
3	No. Visits/Mo. with Hearing Neighbors	-0.202	-0.175
4	Voc. Aspiration Level (Early)[a]	1.674	0.165
5	Reality of Job Preference (Early)[a]	6.545	0.146
6	School Impact on Current Job	-4.070	-0.185
7	Mother's Educational Level (Early)	-0.318	-0.141
8	Marital Status	-2.879	-0.136
9	Scientific Field Interest (Early)[a]	-0.257	-0.166
10	Business Field Interest (Early)[a]	-0.133	-0.129
a	Intercept	51.379	

Note: $\tilde{R}_{c-1,2,\ldots 10} = .478$; $SE_{est} = 9.634$

[a]Obtained from Project RD-1380 (Lerman & Guilfoyle, 1970)

minants include: graduation status (4), school impact on current job (4), high school program (3), percent cross-sex friends (3), current job aspirations (3) and marital status (3). The eight early determinants include: extent of early vocational information and planning (4), reality of early job preference (4), commitment to early job preference (3), business field interest (3), arithmetic achievement (3), clerical ability (3), total equipment at home (3), and hearing loss (3).

Referring again to Table 38, with an R of .500, the percent of variance accounted for by the weighted combination of predictors is 25%. Values of R less than .500 will, of course, account for even less than 25% of the criterion variance. From the standpoint of practicality, regression equations accounting for 25% or less of the criterion variance are hardly worth the computational effort. Thus, if we use a cut-off value of .500 for R in deciding which of the nine criterion measures can be reasonably predicted, we are left with four measures: number of months before the first job (R=.753); judges' ratings of client's most recent job satisfaction (R=.537); percent time employed (R=.595); percent salary increase (R=.520).

Note that "months before first job" is a measure of job-seeking activity, "judges' ratings" is a measure of job satisfaction, "percent time employed" and "percent salary increase" is a measure of job satisfactoriness. Note also that the number of predictors involved in these four measures (12, 15, 15, 14) is considerably more than those figuring in the remaining criterion measures (8, 4, 5, 6, 10). When we examine these predictors in Tables 39, 40, 42 and 43, it is clear that a high percentage of them (61%) are early determinants.

Discussion

Current Vocational Status of Young Deaf Adults

In discussing the current vocational status of young deaf adults living in the Northeast, comparisons will be made, where possible, not only with young hearing adults from the same socio-economic backgrounds and within the same age range, but with young deaf adults from earlier studies. Of the several studies previously discussed, two of them: Boatner, Stuckless and Moores (1964) and Kronenberg and Blake (1966), are particularly useful since both were regional surveys (New England and the Southwest), and both focused on young deaf adults.

Level of Employment

In the present study, deaf males had an average SES job level of 5.5. An SES rating of 5.5 places a client midway between skilled jobs (e.g., auto mechanic), rated 5.0 on the Hamburger Occupational Scale (Hamburger,1958), and semi-skilled to low skilled jobs (e.g., assembly-line work), rated 6.0. This is basically in agreement with the findings of Boatner, Stuckless and Moores (1964) and Kronenberg and Blake (1966) in which 71% and 60% of deaf males reported working in semi-skilled and unskilled occupations. The findings for females are essentially the same. Since these SES levels were significantly lower than those reported for hearing clients of approximately the same age range, this generally lower level is more a function of deafness than of youth, although with increasing age, some of these deaf adults will undoubtedly move into higher level jobs.

Level of Earnings

Direct comparisons of the current earnings of young deaf adults with those reported in earlier studies are not feasible, primarily because of changing economic conditions (e.g., inflation). Even if such comparisons were possible, however, it is not clear that they would be particularly illuminating. In several earlier studies (Lunde & Bigman,1959; Kronenberg & Blake,1966), comparisons of the earnings of the deaf were made with national averages. Such comparisons, as suggested earlier, provide only rough indices of the economic standing of the deaf worker. A more meaningful comparison is one involving young hearing adults from the same socio-economic backgrounds and within the same age range as deaf clients. When this is done it is found that young hearing adults do <u>not</u> earn significantly more than young deaf adults. However, apparently young hearing males do earn more than do young deaf males, suggesting that the earnings of females, whether deaf or hearing, are essentially the same. It is likely, however, that in time the hearing clients will outstrip their deaf peers in earning capacity, as

evidenced by the fact that hearing clients have already begun to obtain salary increases significantly larger than those obtained by deaf clients.

Stability of Employment

In the present study the mean number of jobs held was found to be 2.27 for males and 1.94 for females. Boatner, Stuckless and Moores (1964) and Kronenberg and Blake (1966) reported their findings on job stability in terms of frequency counts (e.g., "86 males reported still working on their first job"). Using these frequencies, mean number of jobs held was computed for deaf males and females from both studies. In the former survey, the mean number of jobs held was found to be 1.76 for males and 1.60 for females. In the latter survey, the corresponding values were found to be 1.79 and 1.51. However, these values are less than the actual means of their respective distributions, since in both surveys only three categories of job numbers were reported: 1,2,3+; all cases of more than three jobs were lumped together with those actually reporting three jobs. Under the circumstances, it is unclear whether young deaf adults in the present study have higher turnover rates than those reported in the earlier studies. More than likely the rates are basically the same for the three samples. Moreover, these turnover rates are in sharp contrast to those reported by Lunde and Bigman (1959), who found 68% of their deaf respondents (n=8927) holding only one job in the preceeding ten years.

Job Satisfaction

Since many of the respondents of the Lunde and Bigman (1959) study were older deaf workers, the discrepancy in turnover rates may represent a developmental phenomenon; younger deaf adults tend to change jobs more frequently upon entering the employment market, than at later stages in their lives. The probable reason for this early job shifting is dissatisfaction; 43% of the young adults interviewed were judged to be dissatisfied with their most recent jobs. In the Boatner, Stuckless and Moores (1964) survey, the percentage reporting dissatisfaction is even higher (55%), although Kronenberg and Blake (1966) report only 36% of their respondents being dissatisfied with their current jobs. Apparently the principal source of dissatisfaction among young deaf workers (30% of the males and 28% of the females in the current study) is with the job itself (e.g., "The job is boring;" "You have to work too fast."). This makes sense since the bulk of these young adults are engaged in semi-to-lower skilled jobs, which tend to be much less intellectually satisfying then the more skilled occupations.

Impact of School and SRS

No assessment of the influence of the various schools for the deaf on the vocational adjustment of young adults was made beyond asking clients their opinions as to whether what they learned in their former schools had been helpful in their current jobs. Approximately 64% of the males and 71% of the females felt that their school experience was helpful. Since there is no reasons to doubt their opinions, it can be concluded that from the viewpoint of these young adults, their former schools have indeed had a positive effect upon their subsequent vocational adjustment.

The schools have been important in at least one other respect—the assistance they provided their graduates in finding their first jobs. For both male and female deaf clients, their former schools ranked first as sources of their first employment, followed closely by their families and their friends. SRS, on the other hand, provided little assistance to these clients in seeking employment. Where SRS had its greatest impact was in counselling young deaf clients to obtain post-high school training, and in providing them with tuition for this training.

Determinants of Vocational Adjustment

As indicated earlier, vocational behavior (as distinct from pre-vocational behavior) subsumes both job seeking behaviors and vocational adjustment (job satisfaction and job satisfactoriness). It is presumed to be influenced by a variety of early and current intra-personal and inter-personal factors. Measures of the early factors were obtained from the clients approximately seven years earlier on the average than those obtained in the current study; the mean age of the clients when first seen in school was 15.87 years, while their mean age when seen recently was 22.92 years.

In order to determine whether any of these presumed factors influence current vocational behavior, nine criterion measures of vocational behavior were subjected to multiple regression analysis. Four of the nine:(1) number of months before the first job; (2) judges' ratings of client's job satisfaction; (3) percent time employed; (4) percent salary increase, were found to be capable of being predicted with a reasonable degree of success (i.e., the amount of variance of each measure accounted for, was in excess of 25%). Of the four, one is a measure of job seeking behavior, one of job satisfaction, and two of job satisfactoriness.

Job Seeking Behavior

Certainly one aspect of job seeking behavior is the amount of time spent looking for one's first job; looking for subsequent jobs is a different type of experience, since one has prior knowledge of the procedure to fall back upon. How well this can be predicted can be seen From Table 38. Twelve predictors account for 56.7% of the variance of this measure. Table 39 lists the "b" and "β" weights associated with each predictor. Of the two, the "β" weights are the more critical for the present discussion since they can be regarded as an index of the relative contribution of each of the predictors. Also, the sign of the weight indicates the direction of the relationship between the predictor and the criterion. Apparently, the most important determinant of the time spent in job seeking is the length of post-high school training. The relative contributions of the remaining eleven predictors fall within a narrow range, as evidenced by their "β" weights.

Predicting the amount of time spent in job seeking activity has theoretical implications, in that it supports the notion that there are measurable early and current determinants of this type of vocational behavior; four current and eight early ones to be exact. Of the four current determinants, length of post-high school training and high school program followed are positively related while high school graduation status and extent of club membership are negatively related. In general, students who go on to obtain post-high school training will spend more lime looking for work then those who began looking immediately upon graduation from high school. Furthermore, the longer this training the longer the time spent in job seeking. What this probably means is that high school graduates are more apt to take the first job that comes along, whereas those who have gone on for more training continue to look for work until they find a job for which their training has prepared them. In addition, those students engaging in occupational training requiring longer training periods are more likely to search even longer for an appropriate training-related job.

The high school program pursued by deaf clients is another determinant of job seeking behavior. Apparently clients who pursued a vocational program in high school took less time to find a job than those who pursued an academic program. This is not surprising, however, since academic programs, in general, do not prepare clients for any particular type of work. However, whether clients pursued a vocational or an academic program, if they graduated from high school, they took less time in finding employment. Finally, clients with more club affiliations took less time in finding employment than did clients with fewer or no club affiliations. It is impossible

to ascertain from the data whether having extensive club affiliations provides more opportunities for obtaining leads about jobs, or simply whether clients who are more interested in clubs are more aggressive in seeking employment.

Regarding the early determinants, three are related to adolescent vocation interests: vocational aspiration level, commitment to job preference, and consistency of vocation interests. Apparently, clients who aspired to higher level jobs as adolescents, and who evinced more of a commitment to their job preferences at that time, spent less time as young adults in finding their first jobs. Such clients are probably both more achievement oriented and more decisive than their peers, and therefore more likely to be seeking jobs more aggresively. What is difficult to explain is the fact that adolescents with more consistent vocational interests (i.e., their job preferences were more apt to fall within the vocational field in which they showed the most interest), took longer as young adults to find their first jobs. Perhaps such clients were more selective in accepting employment, preferring to wait until they found a job more consonant with their interests.

Other important inter-personal determinants were sex, clerical ability and communication skill. Apparently females took longer to find their first jobs than did males, although principally among the females, clients with more clerical ability obtained employment faster. Poor communication skills, on the other hand, were no deterrent to early employment; in fact, the better the rated communiction skill the longer the unemployment period.

The remaining early determinants have to do with aspects of the client's home environment: cultural stimulation and mother's education. Unfortunately the effects are antagonistic. One index of the kind of cultural stimulation provided the deaf child is the amount of equipment found in the home, including such things as typewriters, reproductions of paintings,etc... Clients from homes with more of this equipment take less time in finding their first employment. On the other hand, clients with better educated mothers (who presumably would be more likely to run households with more of such equipment), took longer to find their first jobs. One possible explanation is that better educated mothers run households with larger incomes, and are thus more willing to support a deaf child while seeking employment for longer periods of time.

Job Satisfaction

In estimating job satisfaction two measures were used: (1) the client's own ratings of his job satisfaction, and (2) the ratings of two judges, of the client's job satisfaction. In the former case, a client's job satisfaction was estimated by using the sum of his ratings, on a ten-point scale, of 13 aspects of his most recent job. One of the consequences of this procedure is that it does not allow for a sufficiently extreme response on any scale (particularly negative) to influence the outcome (i.e., the mean satisfaction rating). Thus, even giving a rating of 10 (the worst possible rating) does not shift the mean any appreciable amount. This is not true in the case of the judges' ratings. These ratings were made on the basis of several criteria: the client's statements of the things he liked or did not like about his job, and the kinds of problems he experienced on the job, his perceptions of the attitudes of his supervisor and co-workers towards him, the frequency of lateness, and if employment was terminated, how it was terminated, and the reasons for termination. Although all items were taken into account in evaluating a client's satisfaction, it was not unusual for a particular item to be given more weight in arriving at a decision. For example, a statement such as "The job is too boring" was by itself taken as evidence of dissatisfaction.

In addition to the weighting factor, there seemed to be a tendency among the clients to avoid the negative end of the rating scales. This reluctance to use extremely negative ratings was not present in discussing both their dislikes and problems associated with their jobs. These factors may account for the low negative correlation (-.240) between the judges' ratings and the clients' ratings, and for the fact that, of the two, the judges' ratings were the more highly predictable; the R associated with the judges' ratings was .537, that for the clients' ratings was .474. The negative correlation results from the method of scoring the two measures of satisfaction. In fact, both the clients' and judges' ratings are in the same direction. Thus, as clients' ratings become more positive so do the judges' ratings.

Fifteen determinants (nine early and six current) are involved in predicting clients' job satisfaction as estimated by two judges. Regarding the current determinants, the more satisfied clients are those who work at lower SES level jobs and who have a correspondingly lower level of job aspirations. Furthermore, they are more likely to work in places with a larger number of co-workers and with supervisors who have a positive attitude towards them. Finally, they are more likely to be high school graduates and to have a smaller percentage of friends of the opposite sex.

With the exception of the number of the client's deaf siblings, all of the early determinants have to do with vocationally relevant physical factors, abilities, knowledge and interests. Insofar as physical factors are concerned, both sex and hearing loss are positively related to job satisfaction; females and clients with more profound hearing losses are more likely to be satisfied with their jobs than either males or clients with less severe hearing losses.

Abilities implicated in job satisfaction include both general (intelligence) and clerical; clients with lower IQs and higher clerical ability are more apt to be satisfied. Vocationally relevant knowledge, as measured by the extent of the client's information and planning while still in school, is negatively related to job satisfaction. Students who had accrued more knowledge about the world of work and who had engaged in more planning were more apt, as young adults, to be satisfied with their jobs. Finally, those clients who showed more interest in jobs with strong esthetic or business features are more likely to be dissatisfied with their jobs than are clients with other occupational interests. This is true also of clients whose job choices more closely matched their (then current) communication skills; the greater the reality of their early job preferences, the more likely they are to be dissatisfied with their current jobs.

Percent Time Employed

Percent time employed was originally identified as a measure of job mobility. It seems more likely, however, that it is a measure of satisfactory job performance, even in certain cases where there is high mobility, that is, where a client moves to a "better" job; i.e., a job with a higher salary, with better security, with better growth possibilities, etc. In these cases the client usually has the new job secured before he leaves the old one, in which case there is no appreciable unemployment period. However, in cases where the client has been fired, or quits before being fired, some time is lost in finding new employment and the percentage time employed is correspondingly decreased.

Of the fifteen predictors, seven are current determinants and eight are early ones. Five of the seven current determinants are associated with the client's recent educational experience. Apparently, clients who have obtained post-high school training spend less time employed than clients with no training. Furthermore, the longer their post-high school training, the less time they work. In both cases, clients with additional training are less apt to take the first thing that comes along, hence the smaller the percentage of time employed. Similarly, clients receiving an academic (as opposed to a vocational) program in high school spend less time employed. This is most

likely due to the fact that academically educated clients have fewer vocationally relevant skills to aid them in finding employment. On the other hand, clients have a better chance of working more steadily if they graduate from high school. Also, clients who feel that their former schooling has been helpful in their most recent jobs, also work a larger percentage of time. (It might be argued that clients who work more steadily take a more kindly view towards their education than their less steadily employed deaf peers.)

Only two other current determinants are associated with steady employment: marital status and current job aspirations, and both are negatively related. That marital status is associated with less time employed is probably due to the fact that female clients temporarily, at least, abandon work in favor of marriage and subsequently retire from the job market for varying periods of time as the result of pregnancy. In the case of clients with higher job aspirations, it is quite possible that they frequently ignore the more available lower-level jobs and spend more time looking for higher level ones.

Of the eight early determinants, seven are related to the client's vocational status as an adolescent, and one to cultural stimulation in the home. Thus, clients who displayed a greater knowledge of the vocational world as adolescents (vocational information and planning) and greater computational skills (arithmetic achievement) are employed a larger percentage of the time. On the other hand, more intelligent clients with better reading skills, as adolescents, are employed a smaller percentage of the time. It may very well be that the more intelligent client with better language skills aspire to higher level jobs which, as we have seen, is also associated with less steady employment.

Specific interest patterns during adolescence are also determinants of current steadiness of employment. Clients with an early interest in jobs involving computational skills (note that computation skills themselves are associated with this criterion) and mechanical skills work more steadily than clients uninterested in these types of jobs. It is not clear how these interests are related to current steadiness of employment. One possibility is that there are more jobs available which require these skills, so that even if clients shift jobs, they require less time to find new employment. (This, of course, presumes that clients with these skills are, in fact, employed in relevant occupations.) Another possibility is that there is something about clients with early interest in computational and mechanical type jobs which makes them work more steadily; perhaps they are more easily satisfied, or perhaps they simply make better employees (i.e., perform their work more satisfactorily). In any evant, mechanical and computational type work requires less interpersonal contact than other types of jobs.

The possibility that early interest patterns may reflect some underlying personality factor is given some support by the finding that clients who showed a commitment to a particular job preference as adolescents, also work a larger percentage of the time. Such clients appeared, at the time, to be more decisive than their peers. Perhaps it is this quality of decisiveness which is contributing to steadiness of employment.

Percent Increase in Salary

Obtaining a salary increase is an obvious index of satisfactory job performance, even if the raise is an automatic one. Fourteen determinants are involved in predicting this index, five current and nine early. The current determinants include aspects of the client's social functioning as well as aspects of his prior educational experience. Thus, clients with a greater number of friends and a larger percentage of cross-sex friends obtain larger relative increases in salary. Similarly, clients who have graduated from high school, and those who feel that their former schools had a generally helpful effect upon their most recent jobs, obtain larger relative raises. On the other hand, for those who have obtained additional training beyond high school, the longer the training period the smaller the percentage salary increase. Why this should be is not clear.

Of the nine early determinants, five are associated with the client's vocational status (interests and knowledge) as an adolescent, and three are associated with the client's early home environment. The remaining variable is the extent of the client's hearing loss. Regarding the client's early vocational interests, those who indicated a high interest in verbal type jobs, and a corresponding low interest both in business type jobs and in those classified as interpersonal, obtained larger percentage raises in their most recent jobs. However, those clients whose early job preferences were more "realistic" (i.e., were more consistent with their communication skills at the time) obtain lower percentage salary increases. Since the ability to communicate verbally is a difficult skill to acquire among the deaf, it is possible that a preoccupation with jobs requiring verbal ability is an indication of high achievement motivation. Such motivation could conceivably result in more satisfactory job performance, as reflected by higher percentage salary increases. By the same token, a disinterest in these kinds of jobs, and a corresponding interest in jobs more consonant with a lower level of communication skill, may be associated with lower achievement motivation, and thus lead to lower pecentage salary increases. That lower interest in jobs in the business and interpersonal fields is associated with larger percentage salary increases is probably attributable, as

suggested earlier in connection with percentage of time employed, to some facet of personality, i.e., there is something about deaf clients who indicate a disinterest in jobs in both of these fields which makes them perform satisfactorily in their jobs as young adults. Whatever aspect of personality may be implicated here, it is possible that it is related to an early sophistication about the world of work, since clients who displayed more information about jobs and exhibited more evidence of early vocational planning, now obtain greater percentage salary increases.

Of the three aspects of the client's early home environment, two are reflections of how culturally stimulating his environment was--number of types of books and total amount of equipment in the home. Although both are presumably indices of cultural stimulation, it appears that their effects are antagonistic; the former is positively related to the criterion, the latter negatively related. However, since the predictors are sequentially extracted, what apparently has happened is that the cultural stimulation component common to both measures (the correlation between the measures is .818) is reflected in the first measure, number of types of books. When the second was extracted, its correlation with the first had already been partialled out. What the second measure is reflecting, then, is something other than cultural stimulation, and this "something" is negatively related to percent salary increase.

The remaining two factors--number of deaf siblings and extent of hearing loss are both positively related to percent salary increase. Why a greater hearing loss is associated with greater salary increases is not clear. However, why deaf clients with more deaf siblings get larger percentage raises is more understandable. Deaf clients with more deaf siblings are less socially isolated during their formative years than deaf clients with fewer or no deaf siblings. This is consonant with the finding that both the number of friends and the percentage of cross-sex friends are positively related to percent salary increases.

Implications

Current Vocational Status of Young Deaf Adults

The present analysis of the current vocational status of young deaf adults living in the Northeast indicates that it has not changed appreciably over the past decade. Young deaf adults are still working in essentially semi-skilled and unskilled occupations, and while their earnings are not now significantly lower than those made by young hearing adults from similar backgrounds, it is likely that they will soon fall behind them in earning capacity. Furthermore, their job turnover rates do not seem to have diminished, primarily because young deaf adults continue to be dissatisfied with

the jobs. The situation has not changed primarily because deaf education has not changed, at least to the extent that it does not graduate any more students today than in the past with a sufficient skill in processing language (particularly printed language) to allow more of them to seek higher level, better paying jobs. As recently as four years ago, Gentile and DiFrancesca (1969) reported that even by the time deaf students reach the ages of 18, their mean grade equivalents on the Stanford Achievement Test, Paragraph Meaning Subtest, are not higher than the sixth grade. Furthermore, even these admittedly low figures may be somewhat inflated by guessing, since Moores and Quigley (1967) have shown that when deaf and hearing children, matched on the basis of standardized reading scores, are required to fill in words systematically deleted from textbook passages (i.e., the standard "cloze" procedure for estimating reading comprehension), deaf children do not perform as well as hearing children.

With increasing technological advancements, particularly in automation, the need for semi-skilled and unskilled labor will be drastically reduced, being paralleled by an increasing need for workers with greater skills in language processing. The solution is not more vocational training for the deaf, since many deaf students are unsuited either by temperament or ability to work in vocational occupations, but in improving language instruction in schools for the deaf.

Determinants of Vocational Adjustment

The ability to make reasonably accurate predictions of certain aspects of the vocational adjustment of young deaf adults is important for at least two reasons. In the first place, it has considerable theoretical significance, since the obtained regression equations can provide the basis for formulating a more precise model of vocational behavior than any currently available. In this connection, the present study can be regarded as a vindication of the time and effort expended in an earlier study (RD-1380) investigating the pre-vocational behavior of deaf adolescents (Lerman & Guilfoyle, 1970), since most of the early determinants used in the present study came from this study.

From a practical standpoint, the most effective application of the prediction equations is in the categorization of deaf adolescents still in school (e.g., 13-14 years old) into potentially adjusted and potentially maladjusted workers. The latter group could then be given an appropriate program of pre-vocational training. A potential source of ideas for such a program is the Vocational Information and Planning Index Interview Form (Lerman & Guilfoyle, 1970) which covers a wide range of topics associated with the world of work. In any evant, the program should include such things as how to go about obtaining employment (including how to fill out an

application form), how to go about keeping a job (including such related topics as lateness, absence and raises), how to go about changing jobs (i.e., obtaining a "better" job), and what kinds of jobs are available to young deaf adults.

Actually applying the regression equations involves two procedures. First, measures of all of the relevant early determinants must be obtained. Details for obtaining most of these measures can be found in the present study. In the case of the Vocational Information and Planning Index, a complete interview form and scoring manual can be found in Lerman & Gilfoyle (1970). Secondly, since measures of the current determinants will not be available, the best procedure is to assign the mean values obtained from the present study to these measures.

Summary

In a follow-up to two earlier studies: RD-1210 (Lerman & Gallfoyle, 1970) and RD-2933-S (Lerman et al., 1969), which dealt with particular aspects of the pre-vocational behavior of deaf adolescents, 181 young deaf adults (and 30 young hearing adults) were interviewed in an attempt to determine (a) their current vocational status, and (b) the early and current determinants of their vocational adjustment. The results indicated that the current vocational status of young deaf adults has not changed appreciably over the past decade; they still work essentially in semi-skilled and unskilled occupations, and while their salaries are, at present, no different from those of young hearing adults from the same socio-economic backgrounds, and within the same age range, it is clear that they will soon be outdistanced by their hearing peers in earning capacity. Furthermore, their job turnover rates are essentially no different from those reported in earlier studies.

Regarding the problem of determinants of vocational adjustment, a series of multiple regression analyses revealed that of nine criterion measures, four were capable of being reasonably predicted (i.e., the amount of variance in the criterion measure accounted for by the predictors was in excess of 25%). An average of 14 variables was required to predict: (1) number of months before the client's first job; (2) judges' ratings of clients job satisfaction; (3) percent time employed; (4) percent salary increase. The coefficients of multiple correlation (corrected for shrinkage) associated with these measures are: .753, .537, .595 and .520, respectively. Note that the first measure is an index of job seeking behavior, the second of job satisfaction, and the remaining two of job satisfactoriness. In addition, 61% of the determinants (predictors) were classified as "early;" i.e., they were measures obtained from the clients, on the average, seven years before the clients were seen in the present study.

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APPENDIX A

FORM: Interviewer's Manual Type D. (sample)
PROJECT TITLE: Evaluation of Vocational Development in Deaf Young Adults
GRANT NUMBER: 14-P-55065/2-01 (1970)
FUNDING AGENCY: Social and Rehabilitation Services

A. POST HIGH SCHOOL EDUCATION

(01) YOU NOW IN SCHOOL? Circle Y/N.

If No, (02) YOU HAVE ANY TRAINING AFTER YOU LEAVE_____ SCHOOL? Circle Y/N.

If Yes, go to (03)

If No, go to B.

If Yes, (03) FULL OR PART TIME? Circle F/P under Time?

(04) WHERE? WHAT SCHOOL? Enter name. Abbreviate.

(05) WHAT KIND OF SCHOOL IS THAT? BUSINESS? COLLEGE? Enter type. If not a formal program (i.e., Work-study Program), try to obtain the name and address of the organization and the name of the Director, and enter on a separate sheet.

(06) WHAT THEY TEACH YOU THERE? Probe if necessary (TELL ME MORE) for type of program. Enter under Program.

(07) WHY YOU GO THERE? Enter under Reason.

(08) START WHEN? FINISH WHEN? Enter dates (mo. and yr.)

(09) WHERE GET MONEY FOR PAY SCHOOL, EAT, SLEEP? Enter relation to Client (e.g., DVR, parents) under Support. Go to B.

B. PAST EDUCATION

(10) GRADUATE FROM_____SCHOOL? Circle Y/N under Grad?

If Yes, go to (12)

If No, (11) WHY NOT? Enter reason.

APPENDIX B

FORM: Client's Response Type D. (sample)
PROJECT TITLE: Evaluation of Vocational Development in Deaf Young Adults
GRANT NUMBER: 14-P-55065/2-01 (1970)
FUNDING AGENCY: Social and Rehabilitation Services

Page D1 Client: Interviewer:

A. CURRENT EDUCATION

(01) School now? Y N ; (02) Tng? Y N ; (03) Time? F P ; (04)Name:

(05) Type:_____(06) Program:_____

(07) Reason:_____

(08) Start:____/____; Finish:____/____; (09) Support:_____

B. PAST EDUCATION

(10) Grad? Y N ; (11) Why not?_____

(12) Program: A V I ; (13) School help in getting job? Y N ;

(14) How? or (15) Why not?_____

(16) School help in current/last job? Y N ; (17) How? or

(18) Why not?_____

C. EMPLOYMENT SCHEDULE

Not work (23)-(27)

No.	From	To	Time
1.	___/___	___/___	___
2.	___/___	___/___	___
3.	___/___	___/___	___
4.	___/___	___/___	___
5.	___/___	___/___	___
6.	___/___	___/___	___

Work (23)-(27)

No.	From	To	Time
1.	___/___	___/___	___
2.	___/___	___/___	___
3.	___/___	___/___	___
4.	___/___	___/___	___
5.	___/___	___/___	___
6.	___/___/___/___		___

APPENDIX C

FORM: Initial Coding Sheet, CARD ONE
PROJECT TITLE: Evaluation of Vocational Development in Deaf Young Adults
GRANT NUMBER: 14-P-55065/2-01 (1970)
FUNDING AGENCY: Social and Rehabilitation Service

Qn.		CODE	SCORE	VAR. NO.	COLS.
	Subject Number	001-999			1-3
	Card Number	01,02,...	01		4-5
	BLANK		b		6
	Subject's Hearing Status	Deaf=1 Hear=2		1	7
	Interviewer Number	RC=01 WT=03 CL=05 CT=02 NL=04 JE=06		2	8-9
	School for Deaf Attended	NJ=1 AM=3 NY=2 LX=4		3	10
	Subject Number of any Sib in Sample	001-999		4	11-13
	BLANK		b		14
	Subject's Sex	Male=1 Female=2		5	15
	Subject's Race	Black=1 Oriental=3 White=2		6	16
	Month Subject Left School	Jan=01 Mar=03 May=05 Feb=02 Apr=04 Jun=06		7	17-18
	Year Subject Left School	Last digit of year: 1969=9, 1970=0,...		8	19
	Month of Interview	Jul=07 Sep=09 Nov=11 Aug=08 Oct=10 Dec=12		9	20-21
	Year of Interview	Last digit of year: 1967=7, 1968=8,...		10	22
211	Month of Birth	Jan=01,...		11	23-24
211	Year of Birth	Last two digits of year: 1969=69, 1970=70,...		12	25-26
213	Subject's Marital Status	Sin=1 Div=3 Wid=5 Mar=2 Sep=4		13	27
213	Number of Ss Children (nCh)	If (nCh)>9, enter 9. If (nCh)=0, or if S Single, leave blank.		14	28
213	Spouse's Educational Level	Number of years attended: ...08,...12,...16,...		15	29-30
213	Spouse's Relative Age	Younger=1 Older=3 Same=2		16	31
213	Spouse's Hearing Status	Deaf=1 Hear=2		17	32
213	Number of People (nP) S resides with	If (nP)>9, enter 9.		18	33
213	Number of Hearing Brothers (nHB)	If (nHB)>9, enter 9.		19	34

APPENDIX D

Predictor Variables

No.	Description
1	Sex
2	Marital Status
3	Number of Hearing Siblings
4	Number of Deaf Siblings
5	Total Number of Siblings
6	Mother's Educational Level (years completed)*
7	Father's Educational Level (years completed)*
8	Post High School Training Status (training vs no training)
9	Length of Post High School Training (months)
10	High School Graduation Status
11	High School Program (vocational or academic)
12	Impact of HS on Most Recent Job (helpful vs unhelpful)
13	Current Vocational Aspirations (skilled vs unskilled)
14	Number of Clubs to which Client Belongs
15	Percent Clubs for the Deaf
16	Number of Friends
17	Percent Cross-Sex Friends
18	Percent Same-Sex Friends
19	Percent Deaf Friends
20	Number of Visits with Hearing Neighbors per Month
21	Number of Confidants
22	Percent Confidants who are Relatives
23	SES Level of Most Recent Job
24	Overtime Status on Most Recent Job (yes vs no)
25	Supervisor's Attitude on Most Recent Job (pos.,neutral, neg.)
26	Co-workers' Attitudes on Most Recent Job (pos., neutral, neg.)
27	SES Level of Job Preference*
28	Commitment to Job Preference*
29	Reality of Job Preference*
30	Consistency of Preference*
31	Intelligence (Revised Beta Examination-IQ Score)*
32	Intelligence (Revised Beta Examination-Weighted Total Score)*
33	Adolescent Independence*
34	Total Equipment in the Home*
35	Number of Books in the Home*
36	Number of Types of Books in the Home*
37	Number of Types of Magazines in the Home*
38	Hearing Loss*
39	Communication Skill (rating)*
40	Reading Achievement*
41	Arithmetic Achievement*

Predictor Variables

No.	Description
42	Mechanical/Spatial Ability (Minnesota Paper Form Board)*
43	Clerical Ability (General Clerical Test, Parts I through IV)*
44	Vocational Information & Planning (VIP Index)*
45	Interpersonal Field Interest (California Picture Interest Test)*
46	Natural Field Interest*
47	Mechanical Field Interest*
48	Business Field Interest*
49	Esthetic Field Interest*
50	Scientific Field Interest*
51	Verbal Interest*
52	Computational Interest*
53	Time Perspective*

Criterion Variables

54	Number of Months Before First Employment
55	Number of Jobs Held
56	Percent Time Employed
57	Mean Job Tenure
58	Clients' Job Satisfaction Ratings
59	Clients' Life Satisfaction Ratings
60	Promotion Status (promoted vs not promoted)
61	Percent Increase in Salary
62	Judges' Ratings of Client's Job Satisfaction on Most Recent Job

*Measures obtained from Project #RD-1380 (Lerman & Guilfoyle, 1970)

APPENDIX E

Intercorrelations of Fifty-Three Predictor and Nine Criterion Variables

	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1	290	048	-143	-003	-047	-075	-021	-022	048	210	-008	-152	-173	-067	195	-872	862	017
2		-107	-048	-119	010	083	002	-071	101	176	-117	-137	-039	021	-136	-246	221	044
3			-052	938	007	007	-083	-025	-098	-128	038	025	-019	003	054	-090	091	062
4				296	072	054	-044	-042	-220	129	-015	020	168	095	-027	072	-098	054
5					032	025	-095	-039	-170	-077	031	030	040	035	-062	-061	053	078
6						704	244	129	012	161	-201	-001	189	176	-124	038	-063	-018
7							158	042	111	060	-104	-036	207	191	-120	029	-061	-004
8								692	104	280	-133	072	137	152	087	010	020	-072
9									112	117	-026	097	057	048	189	-018	041	-087
10										-038	061	025	101	061	053	-015	070	131
11											-214	046	052	060	065	-176	173	-010
12												055	-091	003	029	-012	038	-007
13													127	006	015	183	-165	-044
14														670	170	119	-107	140
15															061	048	-062	114
16																-176	277	209
17																	-953	-002
18																		114

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	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
1	032	101	185	-170	-055	038	-105	137	-085	-012	-120	-107	-172	-264	-075	-021
2	-072	-141	315	-080	-067	-107	-044	016	117	076	-027	-034	149	034	-067	-057
3	037	011	-117	182	-107	100	086	151	015	-012	-042	022	-130	-080	085	056
4	-039	102	080	-008	102	-060	-076	-331	136	-008	098	-013	076	-068	-140	-174
5	022	045	-084	172	-067	075	056	030	061	-014	-006	017	-098	-100	033	003
6	027	165	130	071	-037	-116	095	-115	-069	-067	011	-121	179	130	134	082
7	-045	043	220	137	-087	-090	041	-135	-110	-038	-069	-097	156	104	106	088
8	141	102	017	-137	-084	-039	001	-182	-010	-083	187	-011	239	174	122	104
9	066	262	-155	-182	-010	055	047	-221	-066	038	154	-004	229	245	112	078
10	-080	127	069	-119	-106	-053	077	-088	-052	058	105	029	071	-003	102	138
11	125	105	163	-103	-043	-124	-008	-192	074	057	109	-024	176	025	139	065
12	-065	012	-015	008	033	206	148	279	-173	069	-086	080	072	-003	122	128
13	-025	035	-085	029	014	-061	028	-006	109	-024	-077	-045	-059	017	101	056
14	041	041	127	-041	-033	-086	001	-132	-021	047	280	-037	166	-001	043	037
15	-004	-009	036	032	-088	-038	044	-117	-108	055	206	-057	137	-041	-013	-037
16	210	233	-077	-165	176	130	-066	-008	047	190	108	051	099	-081	058	049
17	011	-050	-209	143	-025	-077	063	-083	087	010	210	103	155	270	073	027
18	037	074	179	-183	070	080	-040	121	-110	-022	-187	-090	-102	-236	-012	040

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	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51
1	-014	049	-016	236	268	108	-157	045	-057	475	-206	-518	377	125	-240	488
2	-023	001	013	115	274	298	045	176	063	152	-060	-126	170	-033	-113	171
3	058	-034	013	-102	-227	-315	-119	-272	-246	089	138	-154	-120	05[illegible]	-087	038
4	-218	-151	095	028	124	100	-011	-072	070	051	-133	036	070	007	064	062
5	-020	-085	045	-088	-174	-266	-118	-285	-212	103	086	-135	-090	053	-060	058
6	095	042	-146	153	197	283	068	163	163	-081	060	-004	-015	-271	050	-048
7	083	015	-050	170	195	255	092	169	122	-143	079	068	-063	-244	105	-089
8	103	081	-035	177	238	369	262	422	224	046	-225	-071	216	-197	084	135
9	088	-013	-078	217	304	380	256	369	191	027	-150	-057	145	-161	140	094
10	130	026	-051	040	075	084	075	081	075	009	-058	057	016	018	-085	009
11	126	152	-071	252	313	320	126	289	197	202	-224	-230	238	-126	-025	224
12	121	139	111	-196	-114	-137	034	-111	-070	-025	055	108	-053	033	-013	-127
13	101	107	056	-021	-127	-072	039	-080	-006	-062	-128	090	028	-008	212	004
14	012	-021	037	046	062	106	097	053	147	-113	-008	137	-018	-046	096	002
15	-008	-030	027	-003	013	074	082	057	103	-030	-055	087	063	-054	064	054
16	039	002	-002	175	178	141	146	173	075	059	-090	-066	125	075	-045	126
17	034	-004	056	-242	-231	-071	125	-022	074	-407	141	467	-296	-114	177	-409
18	025	061	-010	241	249	125	-081	074	-038	433	-169	-496	347	112	-204	444

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	52	53	54	55	56	57	58	59	60	61	62
1	264	294	128	-072	-101	-007	-226	010	-032	129	169
2	149	101	-004	084	-031	076	-241	-177	205	-004	043
3	-100	-098	028	-041	-162	-054	107	033	-079	-070	-080
4	048	082	051	-057	-084	-067	-039	-133	093	107	041
5	-079	-066	044	-058	-184	-075	089	-014	-044	-030	-062
6	-011	053	135	029	-009	-078	-016	-187	-059	035	048
7	-040	001	062	051	045	001	-055	-174	-005	033	059
8	311	285	461	130	-338	-183	-103	-195	039	012	075
9	213	298	663	188	-341	-205	-073	-113	023	-055	065
10	034	055	-071	-037	088	053	-149	-032	061	129	158
11	294	249	251	013	-269	-149	-115	-117	164	064	036
12	-067	-073	-123	-004	153	108	-091	-064	-114	-138	029
13	141	147	057	-148	-114	-120	120	-010	001	002	-139
14	-017	-010	-077	-055	070	-023	035	-059	072	115	-054
15	046	003	-033	021	-017	-113	068	-101	036	060	-094
16	082	006	125	082	-002	-112	-114	047	-022	236	005
17	-186	-234	-152	099	126	-012	257	047	034	-151	-115
18	232	257	139	-074	-071	045	-284	-064	-023	201	093

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	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
19	081	090	054	-043	-016	-032	-070	130	-030	066	018	-071	056	053	-098	-001	-043	-028
20		133	-104	-059	095	-123	065	-030	032	050	040	-069	106	035	035	042	040	122
21			009	-259	153	043	-046	-192	-011	098	155	-039	141	014	067	060	066	062
22				-067	-065	-064	166	-016	-002	085	-020	-119	090	-138	036	066	096	077
23					-229	-115	023	212	-017	-032	-148	-086	-210	-078	110	105	078	020
24						056	128	041	116	-093	-088	-053	206	149	-097	-128	-165	-090
25							-079	133	009	-055	-082	006	001	-019	124	075	175	152
26								-094	-059	105	002	-041	139	135	230	131	139	099
27									-099	-050	-154	-000	-147	-117	022	103	077	081
28										-137	081	044	-003	-049	-088	-157	-074	-066
29											089	033	066	-009	042	020	030	-035
30												071	152	018	-059	-045	-019	033
31													025	013	029	-068	-078	-056
32														321	096	085	050	080
33															097	066	002	-088
34																822	818	681
35																	853	747
36																		765

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	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
19	-032	-079	-035	-072	-004	060	018	014	-100	016	119	033	-117	114	057	003
20	095	065	022	019	070	156	054	023	-073	-013	083	-042	102	100	118	006
21	-054	181	229	144	059	071	007	091	-114	-122	074	035	082	148	034	149
22	-008	-047	065	098	050	080	-046	-014	-096	-040	076	-021	-012	051	018	102
23	-043	-282	-259	-282	-251	-252	-289	-207	150	193	-225	-007	-029	-278	-225	-304
24	111	078	027	147	217	115	117	-046	054	-024	-016	-025	200	026	075	139
25	047	010	-090	-131	-017	-079	-042	-002	-038	-080	092	147	-125	097	-036	-065
26	064	-006	009	104	213	182	018	-026	043	038	034	-237	144	001	108	198
27	067	-254	-282	-256	-159	-170	-210	021	163	-131	-043	043	-113	-032	-117	-184
28	095	033	041	014	-078	-052	004	-109	-013	059	-081	095	059	-022	-010	-038
29	-030	148	147	098	059	120	105	184	072	-017	111	058	-014	107	050	097
30	-159	134	152	160	159	126	181	038	-257	038	265	-133	-170	161	291	096
31	-096	096	-015	064	021	010	007	-068	096	128	-120	033	012	-179	-139	-085
32	048	259	423	594	686	654	416	-094	-125	111	090	-089	220	-015	180	134
33	030	133	157	267	222	297	210	-201	081	202	-113	-350	143	-194	021	-002
34	049	017	006	076	157	093	-011	-037	028	-076	031	-024	-095	-006	-042	-098
35	-090	-001	038	078	128	130	036	-078	016	-023	009	-068	-017	-035	-084	-127
36	-040	024	019	037	106	069	050	-037	-030	-068	058	-013	-080	004	-043	-125

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	54	55	56	57	58	59	60	61	62
19	-124	020	065	049	-084	-082	059	056	-095
20	071	082	-113	-150	129	-165	-082	020	-009
21	170	070	-096	-115	-047	-143	-052	079	078
22	-031	-087	056	051	-235	-266	089	075	126
23	-133	008	-205	-159	247	212	-208	-186	-288
24	033	-064	194	204	-095	-060	165	332	102
25	-024	-066	031	065	-125	-100	154	135	266
26	039	-094	071	139	047	-114	-018	064	081
27	-287	-038	128	051	076	173	-125	-009	-088
28	-082	-016	042	016	-178	-083	032	069	-020
29	061	033	065	-118	074	076	-021	-145	-128
30	180	066	047	018	-058	-103	074	-056	024
31	-040	092	-111	-065	105	148	-020	-078	087
32	056	266	144	058	143	325	110	036	028
33	061	214	046	047	-065	127	058	-064	020
34	-072	127	008	-082	055	001	-020	034	042
35	-090	139	022	-078	-068	019	-001	065	-014
36	-044	060	013	-078	023	-069	-010	110	020

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	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
37	021	-051	022	019	137	031	086	-018	-138	-106	147	-029	-091	045	029	-179	-032	-036
38		-226	-103	-080	060	-020	-000	072	002	-014	-013	-008	171	-020	075	-006	-092	-005
39			594	555	195	407	371	240	-220	-234	303	-058	034	322	300	368	110	115
40				815	306	601	444	198	-192	-228	258	-048	059	310	271	328	250	073
41					491	774	515	113	-230	-116	268	-162	183	220	314	387	248	170
42						551	325	-017	-135	079	032	-111	225	-035	137	059	119	206
43							392	103	-217	-064	283	-184	131	224	379	400	181	320
44								002	-245	-007	187	-106	215	135	242	231	155	151
45									-249	-072	499	049	-394	660	374	332	093	075
46										184	-698	-253	081	-534	-615	-390	-148	-078
47											-447	-059	413	-662	-216	-228	-147	050
48												112	-303	804	792	528	201	000
49													-185	195	-105	-054	-194	-141
50														-345	-049	089	109	035
51															651	515	166	-053
52																686	287	030
53																	267	-009
54																		-028

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	56	57	58	59	60	61	62
37	005	-003	010	-085	044	080	057
38	141	125	095	-013	-036	182	177
39	-034	-030	-176	-109	105	042	021
40	-060	067	-189	-167	210	115	089
41	034	087	-200	-221	262	137	118
42	088	103	-117	-229	068	088	049
43	015	031	-184	-212	179	094	147
44	167	116	-033	-144	235	158	-044
45	-082	-008	-067	079	-000	-029	050
46	-006	002	082	183	-126	-081	012
47	170	052	050	-068	012	-073	-107
48	020	045	-125	-119	123	090	012
49	087	-014	056	074	004	073	-096
50	042	030	089	-179	-019	086	-037
51	-014	030	-096	-026	153	193	074
52	037	091	-148	-175	189	086	018
53	001	037	-189	-131	143	076	093
54	-453	-179	-019	-092	112	-101	061

	56	57	58	59	60	61	62
55	-057	-445	-011	043	-033	-265	-189
56		593	-172	-148	092	281	045
57			-195	-218	251	318	214
58				452	-084	-074	-240
59					-151	-180	-184
60						105	101
61							257
62							